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ABSTRACT

These standards describe the purposes and services, (including administrative, financial, and evaluative elements) of effective learning resources programs (LRPs), and outline the development of a single integrated service concerned with the improvement of instruction. An introductory section describes the roles, objectives, and purposes of LRPs and a rationale for the standards. The scope and functions of the LRP are then detailed, including developmental, distribution, creative/production, materials/resources, maintenance and engineering, and research/evaluation functions; elements of adequate service; general standards for LRPs; and specific standards for various functions, the budget, and administration. It is recommended that data be collected on such LRP components as staff, facilities, budget, services, and resources; that a mechanism be provided for publication of data; and that the collection of data be monitored for publication. Appendices include the Association for Educational Communications and Technology (AECT) Learning Resources Program Profile; Standards for Learning Resources Programs--Instructional Check Sheet; Management Process Model for the Learning Resources Program Profile; Guide for Self Study of Learning Resources Programs in Higher Education; Guidelines for Depreciation of Equipment; and Constituent Members of the Council on Joint Secondary Accreditation. A 7-page bibliography and 12 charts, which depict standards by functions and are suitable for making transparencies, are included. (LMM)

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Standards for College and University

Learning Resources Programs

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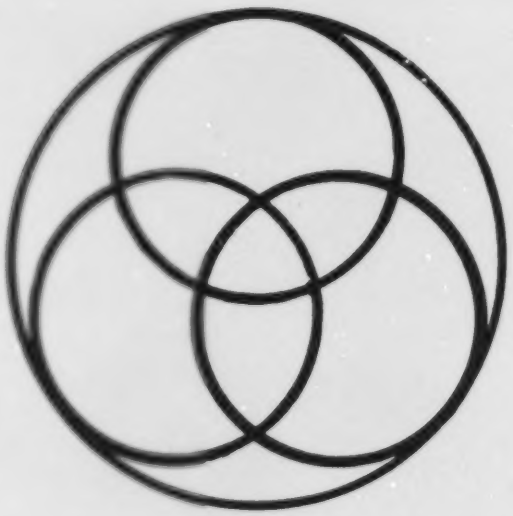

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PREFACE

Educators in colleges and universities across the land have been waiting for a document such as this for the past twenty years. The late Jim Finn wrote of such a need even during the fifties. Bill Fulton headed a study in the early sixties devoted to the aims to which this work addresses itself. In 1965, Gene Faris and Mendel Sherman headed a NDEA Title V institution research contract aimed at (and partially succeeding in reaching) the same objectives. In 1971 yet another group, Task Force IV, chaired by Gaylen Kelley, produced a monumental work later to emerge as an AECT publication, entitled College Learning Resource Programs: A Book of Readings, in 1977.

It is now 1980 and our nation's colleges and universities have yet to receive a definitive set of guidelines or standards which apply to their learning resources programs. We, the members of Task Force II, in the preparation of this document, sincerely hope that our contribution will at least partially remedy the situation.

This work could never have been accomplished had it not been for the many years of painstaking study which preceded it. The bibliography appended to this work speaks mainly to writings of a more recent vintage. This in no way is to minimize the research of our predecessors, for it is to all of them that we dedicate this current publication. Our deepest thanks. We would, additionally, like to thank the members of the Council on Post-Secondary Accreditation who very kindly provided copies of their professional standards.

I cannot conclude this preface without acknowledging the contributions of our current task force members and those "interested volunteers" who have worked so long and hard to make this work a reality. Their names are in this work but the toil, sweat, frustration, agonizing, and debate do not get listed, either in the contents or the appendix. It should!

View this publication, not as an ultimate solution for which you've been searching, but just what it claims to be--a set of standards and guidelines. Expect it, like the profession in which we work, to be constantly changing, thus striving to better meet the needs of those whom we serve.

The members of Task Force II anticipate that the materials contained herein will be subject to national dialog, scrutiny, field-testing, and ultimately, adoption. We solicit your reactions, commentary, and positive criticism. Only in that way shall we be able to improve and revise as needed. Our goal was simple--we wanted to put in your hands a document you could use with your administration in whatever type of institution you might be, to better improve instruction.

Richard A. Cornell, Chairperson
Task Force II

FORWARD

This book is the result of a great deal of effort that began ten years ago to provide guidelines for the operation of learning resources/media services programs at all levels of education. AECT published a book of readings entitled COLLEGE LEARNING RESOURCES PROGRAMS in 1977 - as a predecessor to this document. Two other predecessor publications must be mentioned: CRITERIA FOR PLANNING THE COLLEGE AND UNIVERSITY LEARNING RESOURCES CENTER by Irving R. Merrill and Harold A. Drob (AECT, 1977), and "Guidelines for Two-Year College Learning Resources Programs", which was published in 1972 and was developed jointly with the American Association of Community and Junior Colleges and the Association of College Research Libraries. The latter document has been under revision recently and is in the process of being published separately.

STANDARDS FOR POST-SECONDARY LEARNING RESOURCES PROGRAMS is a product of a major Committee effort in the Association. The decade of effort that resulted in this product has been lead by Gaylen Kelley, David Crossman (who almost singlehandedly pulled together the aforementioned College Learning Resources Programs), Richard Decker who chaired the entire Task Force activity for Post-Secondary Guidelines in recent years, and, in particular, Dick Cornell who along with his Committee diligently pursued the goal of completing these guidelines. The Committee names are listed below.

So now we have standards for learning resources/media programs at all levels of formal education. It remains to keep those guidelines up-to-date and useful, and to apply them in the institutions for which they were developed.

HOWARD M. HITCHINS
Executive Director, AECT
June, 1981.

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STANDARDS FOR COLLEGE AND UNIVERSITY LEARNING RESOURCES PROGRAMS

SECTION I. RATIONALE

Colleges and universities are perhaps the most complex of all forms of educational institutions. They are involved with a broad range of subject fields for both student educational programs and faculty research, and the levels of information needs range from general to very specialized. The systematic development of services, facilities, staff, equipment, and resources maintained to support these educational and research needs for the process of higher education thus must be itself both complex and encompassing.

Experience at a wide variety of senior institutions indicates that a central agency provides the most efficient and effective means of coordinating and administering functions and resources which serve all programs of the institution. Organizational schemes may include centralization of all the Learning Resources Program function's support and accountability in a single autonomic unit or a combination of centralized/decentralized activities with a central agency for general institutional programs and high-cost support functions that provide backup for individual Learning Resources Programs within various campus units. Elements of these standards may be selected for institution-wide analysis or to analyze individual programs.

The role of the Learning Resources Program within this system is to act as facilitator: to bring together the users, the materials, and the methods of information retrieval, and to assist those users in achieving an efficient, effective application of the materials and methods for their particular purposes. Learning Resources Programs support the educational system in five major areas:

1. Support for instructional development.
2. Access to information resources and methods of teaching and learning - through evaluation, selection, reference, cataloging, and support equipment.
3. Distribution of information resources - through technology and organization.
4. Use of information resources - through instructional services and references.
5. Creative development of information resources - through appropriate facilities and equipment.

Common to all of these areas is the administrative responsibility for evaluating and developing staff, facilities, equipment and services, and for providing leadership in the innovative use of learning materials and methods.

Each Learning Resources Program will be unique to its parent institution to some degree, molded by the institution's objectives, needs, and organization. However, all effective programs must contain elements of all of the above five areas in varying degrees of sophistication. It

is no longer possible for either student, teacher, or faculty researcher to obtain a full range of information on a given subject without the use of sophisticated retrieval methods. It is also no longer possible for the student to fully understand a subject without access to varying formats of materials. Information has increased not only in complexity and in volume, but in its use of multiple channels of communication - aural, visual, verbal, written, tactile, and even olefactory. It is the role of the Learning Resources Program to insure that its educational clientele has available the ability and the means to use all of the communications channels. These standards for college and university Learning Resources Programs are specifically descriptive of the purposes, services, administration, finance, and evaluation essential to carry out these programs.

The changing nature of both educational technology and information resources which must be made available to faculties and students engaged in higher education necessitates continual reexamination of the institutional services mandated to access, develop and deliver learning resources. Traditionally, those services have included such separate units as libraries, media centers, instructional development centers, computer centers, self-instructional centers and audio-visual production centers, among others. Administrative and functional divisions and separations have existed between these units, based upon the types of media or upon the history of their development. Such divisions would seem to encourage, rather than diminish, barriers to the instructional and research support of a sound educational system.

By examining functions rather than traditional or historical administrative and format divisions, these standards outline the development of a single integrated service concerned with the improvement of instruction. Such a service should provide efficient access to and delivery of information to its users, regardless of format, and based on need. These standards provide criteria by which an institution can measure its progress toward such full and integrated support of the instructional and research needs of its students and faculty. They can act as a guide to the development and organization of Learning Resources Programs.

Cost efficiencies and efficiency in user services and staff utilization would suggest the wholly integrated development of learning resources services as an ideal. However, it is recognized that many institutions will find themselves somewhere on a continuum between a segregated library and various audiovisual and computer services, and a fully integrated single information development and delivery service. Regardless of the degree of formal functional integration which a particular institution has achieved - where on the continuum it might find itself - the interlocking nature of information communication today necessitates that the closest possible degree of cooperation and coordination exist between various programs if the student body and the faculty are to be well served.

Because of their specific needs or programs, some institutions will need to deviate from these standards. The standards represent recommended practices, variant procedures in each case should be supported by valid reasons directly related to institutional objectives.

SECTION II: LEARNING RESOURCES PROGRAMS - STANDARDS FOR COLLEGES AND UNIVERSITIES

1. GENERAL STATEMENT:

The quality of instructional support services within Learning Resources Programs is uneven across the spectrum of colleges and universities. Many institutions have developed outstanding programs which are responsive to the instructional, research, and administrative needs of the institution; however, many others fall dangerously short of the minimum standards necessary to support even the most elementary needs of the students, faculty, and staff that they serve.

While these standards are intended neither to dictate the kinds of services offered by the institution, nor the scope of the programs, we recognize that specific base-line services are generally essential to the effective functioning of an academic program. Beyond these minimum levels of support the individual institution must maintain services specifically designed to meet the stated programmatic goals of its various constituencies.

2. SCOPE OF THE LEARNING RESOURCES PROGRAM

Learning Resources Programs generally provide direct support to the following areas within the institution:

INSTRUCTIONAL PROGRAMS - which include classroom, individually guided, independent learning, or other programs generally involving direct and/or indirect interaction between instructor and learner

RESEARCH PROGRAMS - either basic or applied

ORIENTATION PROGRAMS - which are formalized programs for students, faculty, and staff specifically designed to familiarize each with:

A. The services available through the Learning Resources Program,
B. How the services may be accessed, and
C. How the services may best be utilized to meet their needs.

DEVELOPMENTAL PROGRAMS - which endeavor to increase the basic skill levels of students as learners, and faculty as teachers, and the instructional effectiveness of the teaching and learning process

SPECIAL PROGRAMS - activities of the institution which enhance specific non-academic programs, such as cultural events, administrative and operations functions, and alumni and public relations activities of the institution.

3. FUNCTIONS OF THE LEARNING RESOURCES PROGRAM

Services provided by the college or university Learning Resources Program generally fall into six functional groupings:

DEVELOPMENTAL FUNCTIONS
- A. Faculty development services
- B. Instructional development services

DISTRIBUTION FUNCTIONS
- A. Equipment distribution services
- B. Materials distribution services
- C. Electronic distribution services
  - 1). video information systems
  - 2). audio information systems
  - 3). computer information systems

CREATIVE/PRODUCTION FUNCTIONS
- A. Audio services
- B. Visualization services
  - 1). graphics
  - 2). still photography
  - 3). motion photography (silent)
- C. Combined creative services
  - 1). slide-tape (still photography-audio)
  - 2). sound motion photography
  - 3). television
  - 4). models, realia, and other fabrication

MATERIALS/RESOURCES FUNCTIONS
- A. Permanent materials collection
- B. Interinstitutional loan (ILL) including film and videotape rental
- C. Networking (Consortia)

MAINTENANCE AND ENGINEERING FUNCTIONS
- A. Equipment maintenance
- B. Equipment repair
- C. Equipment systems design
- D. Equipment systems construction
- E. Materials maintenance (splicing, binding, etc.)

RESEARCH/EVALUATION FUNCTIONS
- A. Toward improvement of the teaching/learning process
- B. Toward improvement of Learning Resources Program services
- C. In selection of materials/resources

Each of the six functional areas (above) is viewed as functionally interrelated and intrinsic to an appropriately operating Learning Resources Program. Although no specific mention is made of the interrelationship to and with the institution's academic library or computing services, there is clearly a functional ralationship between the services of the Learning Resources Program and those of the library and the academic computing services. The degree to which the agencies interact is dependent upon local needs and political realities. We urge, however, that serious consideration be given to them within the context of the institution's instructional support services mission.

These standards do not purport to advise on types or levels of service provided by academic computing services. This area is changing so rapidly that any comments we make would be useless before they appeared in print. Traditional library services are well-defined in the ACRL Standards, and would be redundant here.

4. ELEMENTS OF ADEQUATE SERVICE:

Each function and subfunction (service) is measured against a unified and comprehensive standard which incorporates the following elements:

A. The needs and objectives of the institution and the adequacy of the function/service in meeting them;
B. the adequacy and appropriateness of personnel, equipment, and facilities for/of each function/service; and
C. the adequacy and appropriateness of the degree of interaction of all services.

These criteria for college and university Learning Resources Programs are neither arbitrary nor capricious. They are the result of many years of experience and research within institutions of every conceivable size and type.

Levels of service of the functions are delineated as:

A. MINIMAL - defined as the lowest level of equipment, personnel, and facilities (physical spaces) necessary to begin service in that area within any institution.
B. BASIC - defined as a second stage of development which provides an acceptable service capacity predicated upon the day-to-day demands for that service as related to an institution's objectives.
C. ADVANCED - defined as an expanded capacity necessary to support a sophisticated and comprehensive institutional service as related to an institution's objectives.

Equipment, personnel, and facilities for each level of capacity includes that of each lower level. For example, a BASIC level includes those of the MINIMAL level as well as those of the BASIC level. When part-time personnel are specified at the MINIMAL level, it is anticipated that certain individuals, with appropriate multiple qualifications, would be shared among functions.

In certain cases, a basic or advanced level will be the minimum level acceptable due to the functional interrelationships of specific services. For example, the introduction of SLIDE-TAPE services requires that both VISUALIZATION and AUDITORY services achieve a basic standard as a minimum. Also, and very importantly, the DEVELOPMENTAL services must have a strong base-line program which supports them.

In outlining standards for equipment, personnel, and facilities, it is impossible to delineate each specific item or resource needed at each level. Therefore, certain general components and resources are

implied and assumed, such as secretarial and clerical support, record keeping, adequate utilities service, ventilation and cooling, wiring, intercommunications, etc., as necessary for the integrated and appropriate functioning of the services and equipment systems.

These standards may be utilized by an institution to determine its current level of service capability. In so doing, the evaluator is urged to remember that the minimal, basic, and advanced levels are NOT discrete steps. Rather, there are gradations within each level and between the levels which will identify the unique service capabilities of each institution.

The MINIMAL criteria for a Learning Resources Program describe a sub-standard level of service in recognition that, for varied reasons, certain institutions may have sought to limit the program below that which we believe to be an appropriate level for proper functioning. These criteria have been listed in order to point out that, below these levels, we believe that no real program even exists. We recommend that the BASIC level be the entry point for most programs.

In establishing the BASIC criteria we acknowledge that contemporary educators should not only have a reasonably varied set of instructional resources and techniques from which to draw, but PREFER to utilize those they find effective. These criteria, therefore, are designed to support the instructional activities of a significant part of the teaching population. In most instances the institution will find that the BASIC criteria are the appropriate entry level to support specific needs and maintain the inter-relationship of services. In each case, the BASIC criteria represent a stage of development that incorporates the MINIMAL standards.

The ADVANCED criteria represent an expanded capacity necessary to support a comprehensive instructional service, incorporating both the MINIMAL and BASIC criteria, particularly where active programs of instructional and faculty development are ongoing and where research in instructional methods is being carried out. Where institutions support academic programs in the training of learning resources personnel, or others in similar fields, additional parallel or complementary resources may be needed.

Under no circumstance should any criteria, including those of the advanced, be considered optimum or maximum. Such a decision must, as with all criteria, be measured against, and predicated upon:

A. the needs and objectives of the institution and its various constituencies, and
B. the degree of satisfaction evidenced with existing services.

Therefore, the growth of services, and their "ultimate" configurations, must be tied to both qualitative and quantitative factors.

In applying these standards, the level of services provided must take into account the needs and objectives of the institution, both when establishing the service and in its growth. In each case, the minimal standard is the ABSOLUTE BASE necessary even to claim that a Learning

Resources Program exists. It must NOT be interpreted as an adequate program for an institution. Both the size (student and faculty FTE) and needs of the institution must be carefully assessed in determining the appropriate level for each service. Similarly, progressive growth must be predicated upon the needs and demands for each service.

Quantitative factors:

The growth of the number of equipment items, or the complexity of a creative service (for example), should be predicted upon demand versus the ability of that service to meet the demand. Obviously, if all demands (requests for service) are met, growth need not occur; however, when demand exceeds capacity (and denials of service therefore occur) at a predetermined level, growth is imperative.

While a strong argument can be made that any denial of services is detrimental to the instructional process, esoteric and erratic demands can cause a skewing toward unnecessary services. A more realistic approach is to plan for growth when denials exceed a maximum of 5% of the total service requests within any given service category on an annual basis.

Growth MUST occur. When any service is unable to meet a significant percentage of the requests made of it (and in no case should the turn-down rate exceed 5% of the requests made), then it is imperative that growth adjustments be made.

Qualitative factors:

Not all growth can, or should, be tied to quantitative factors. Often, a particular service should be created, and faculty led to its proper use, in order to meet specific stated goals and missions of the institution. The knowledge and professional judgment of the Learning Resources Program's management may be the determining factor in this instance.

Additionally, because of functional inter-relationships among the Learning Resources Program's services, growth and development in one service may REQUIRE development of a related or supportive service. For example, development of the capacity to produce slide/tape programs requires the creation of visualization and audio services (under the Creative/Production Function) if none previously existed. If the services did/do exist, growth in their service capacities may need to occur prior to the introduction of enhanced services.

5. STANDARDS FOR LEARNING RESOURCES PROGRAMS

It is generally assumed that the support functions/services contained herein are utilized for the improvement of the institution's academic/instructional programs as first priority. However, it is recognized that support of other institutional programs will be appropriate so long as the primary mission of the service is not disrupted. In such cases, appropriate additional financial and other resources will be provided when such additional support is expected.

It is generally expected that the emphasis and efforts of each service will be placed on quality of performance as opposed to quantity. Furthermore, in addition to the equipment, facilities, and personnel specified for each service, general resources necessary to support the appropriate functioning of that service will be made available. These include appropriate work spaces, communications, secretarial and bookkeeping staff, office supplies and equipment for professional staff members, etc.

5.1 General standards: Each institution shall maintain a Learning Resources Program:

A. which is consistent with its institutional mission and goals.
B. which meets or exceeds the minimum criteria established herein.
C. which is responsive and adaptive to the changing needs of its clients.
D. which is accountable for all activities undertaken.
E. which includes access to each of those functions identified in this document.

5.2 Each institution shall establish a statement of policy for the Learning Resources Program, including its relationships to other entities of the institution. The statement shall reflect the institution's conception of the role that the Learning Resources Program plays in accomplishing the institution's goals and objectives.

5.3 The Learning Resources Program shall establish a statement of annual and long-term goals and objectives.

5.4 Each institution shall recognize that specific programs and/or needs may from time to time require the development of services which are beyond the scope of the standards contained herein.

5.5 Each institution shall provide the Learning Resources Program with the general resources necessary for the full and appropriate functioning of its services including, but not necessarily limited to:

A. utilities, including electrical, plumbing, cooling, heating, and ventilation.
B. general secretarial and clerical support.
C. communications (e.g. telephone, computer services, etc.)
D. access to record keeping services.
E. offices, and the supplies and equipment normally necessary for proper operations.
F. appropriate work spaces.

5.6 Each institution shall recognize that the primary role and mission of the Learning Resources Program is in support of the academic/instructional program.

5.6.1 Support of other institutional activities will be appropriate so long as the primary mission of the Learning Resources Program is not interrupted or degraded, and that additional support and resources are made available to carry out such activities.

5.7 Each institution shall recognize that the emphasis of each Learning Resources Program or component thereof will be placed on the quality of performance as opposed to quantity.

5.8 Each institution shall provide the Learning Resources Program with a budget:

A. adequate to meet its role and function.
B. which is separately identified from any other institutional budget.

5.9 Each institution shall recognize and encourage:

A. the professional status and functioning of the managers and staff of the Learning Resources Program, and its components, where appropriate.
B. the professional development of Learning Resources Program staff through supported development opportunities both on and off campus.

5.10 Each institution shall endeavor to develop a staff within the Learning Resources Program in which one member (at minimum) is specifically (or primarily) responsible for one of the six major functions. In no case shall any staff member have primary responsibility for more than two major functions.

6. SPECIFIC STANDARDS:

6.1 DEVELOPMENTAL FUNCTION

Purpose: This service provides leadership and expertise in assisting members of the faculty to improve the quality and appropriateness of the teaching/learning process.

Components:

A. Instructional Development
B. Faculty Development

6.1.1 Instructional Development: (See Chart No.1)

A. Each institution shall maintain a program whose primary goal is the improvement of the teaching/learning process through the appropriate development of instructional methods, materials, and other resources designed to optimize information and skills acquisition.

B. The instructional development program shall identify and use a process of systematic assessment, evaluation, and development involving instructional and learner objectives, materials, facilities and other resources, observed outcomes, and modification where required.

C. The instructional development program shall be undertaken by an interdisciplinary team of specialists in the areas of learning, tests and measurement, library and information science, psychology, media (including production, facilities/equipment, and materials specialists), content specialists, instructional developers, and others as required.

D. The instructional development program shall be viewed as a long-term systematic process of significant proportions requiring a substantial investment of resources and commitment.

E. The Learning Resources Program shall be structured in such a manner, both philosophically and pragmatically, that it supports and uses the instructional development process as well as providing direct services.

F. The institution shall make provisions whereby members of the faculty engaged in instructional development programs shall have their "load" reduced to allow adequate time for full participation in the process.

CHART 1 STANDARD 6.1.1

Instructional Development Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	MAY BE ASSUMED BY DIR. OF LRC OR DESIGNEE; 1/2 TIME MINIMUM PREFERRED. M.A. PREPARED DEVELOPMENT ASSISTANT.	NONE REQUIRED.	NONE REQUIRED.
BASIC	ASSISTANT DIRECTOR FOR DEVELOPMENT; DOCTORAL EMPHASIS IN INSTRUCTIONAL DEVELOPMENT. CLERICAL ASSISTANT.	PRIVATE OFFICE WITH ADJOINING CONFERENCE AND WORK SPACE.	ADDITIONAL OFFICE EQUIPMENT; ACCESS TO COMPUTER AND PRODUCTION EQUIPMENT.
ADVANCED	1 ADDITIONAL DEVELOPER PER 100 FACULTY. 1 CLERICAL ASSISTANT PER 3 DEVELOPERS. 1 GRADUATE ASSISTANT PER DEVELOPER.	1 OFFICE SPACE PER INDIVIDUAL; PLUS 1 PER 50 FACULTY MEMBERS.	ADDITIONAL OFFICE EQUIPMENT AS NEEDED.

Instructional Development - Minimal criteria
The institution shall have:

A. The ability to undertake instructional development programs of significant proportion with one or two faculty members annually.

B. The resources available and committed as necessary to implement outcomes of the instructional development process.

C. A commitment to assign specialists to instructional development team efforts on a part-time basis.

Instructional Development - Basic Criteria
The institution shall have:

A. An established instructional development office within the Learning Resources Program capable of undertaking two (or more) major instructional development projects, and several smaller ones, annually.

B. A commitment to provide a reduced load of one course for participating faculty.

C. Assigned specialists to the instructional development office as a scheduled part of their duties.

Instructional Development - Advanced Criteria
The institution shall provide:

A. An instructional development office staffed with one developer per 100 faculty members.

B. Assignment of team specialists to no less than one-half time responsibilities to instructional development projects.

C. Regularly scheduled reduction in loads of not less than 10% of the faculty for instructional development projects.

6.1.2 Faculty Development:

CHART 2 STANDARD 6.1.2

Faculty Development Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	MAY BE ASSUMED BY DIR. OF LRC OR DESIGNEE; 1/2 TIME MINIMUM PREFERRED. M.A. PREPARED DEVELOPMENT ASSISTANT.	PART-TIME CLASSROOM OR SIMILAR MEETING SPACE.	NONE REQUIRED.
BASIC	ASSISTANT DIRECTOR FOR FACULTY DEVELOPMENT; PREPARATION IN STATISTICAL ANALYSIS, TESTING, AND SIMILAR AREAS. CLERICAL ASSISTANT.	PRIVATE OFFICE WITH ADJOINING CONFERENCE AND WORKSPACE.	COMPUTER TERMINAL ACCESS.
ADVANCED	1 ADDITIONAL DEVELOPER PER 100 FACULTY OR PORTION THEREOF. 1 CLERICAL ASSISTANT PER 3 DEVELOPERS. 1 GRADUATE ASSISTANT PER DEVELOPER.	1 OFFICE SPACE PER INDIVIDUAL; PLUS 1 OFFICE PER 50 FACULTY MEMBERS.	ADDITIONAL COMPUTER ACCESS FACILITIES.

Each institution shall maintain a program whose primary goal is the improvement of the faculty member's ability to teach. Such a program shall incorporate, but shall not be limited to, development of the following skills:

A. Analysis of ertering and exiting learner skills.
B. Test and measurement development and evaluation.
C. Evaluation and use of instructional materials, methods, and media.
D. Analysis and development of instructional objectives.
E. Development of appropriate instructional strategies.

The faculty development program shall be considered as an integral part of the faculty member's "load" with appropriate reductions in other activities as necessary.

Faculty Development - Minimal Criteria

A. Duties may be assigned to the individual responsible for management of the Learning Resources Program or an Instructional Developer.

B. Incorporates mini-sessions, seminars, and workshops on a regularly scheduled but infrequent basis.

Faculty Development - Basic Criteria

A. Primary responsibility for faculty development is assigned to one individual within the Learning Resources Program.

B. Frequently scheduled programs are offered related particularly to faculty's instructional development programs.

C. Programs coordinated by/for specific academic areas are undertaken.

Faculty Development - Advanced Criteria

A. Existence of a multi-person department with specific responsibility for faculty development.

B. Faculty development programs are undertaken for specific disciplines on a systematic basis.

C. Programs are offered by an interdisciplinary team of specialists.

D. Programs are closely tied to the instructional development program undertaken by members of the faculty.

6.2 RESEARCH AND EVALUATION FUNCTION

Purpose: To develop and maintain a set of procedures for collecting data and knowledge regarding the effectiveness and efficiency of the Learning Resources Program and process, and to disseminate and utilize such knowledge for the benefit of the institution and the learner.

6.2.1 Clearly stated procedures shall exist for the collection of summative and cumulative data necessary to evaluate all aspects of the Learning Resources Program.

A. Much of this data will be quantitative. Examples include circulation totals, equipment delivery totals, amount of transparencies produced, total number of faculty and students served during a period of time. An important segment of the data collected shall be the amount and types of services that could NOT be provided, and the reasons for such defaults.

B. An effort should also be made to collect qualitative data which reflects user attitudes toward the scope, quality, effectiveness, and accessibility of services being offered.

CHART 3 STANDARD 6.2

Research and Evaluation Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	MAY BE ASSUMED BY DIR. OF LRC OR DESIGNEE.	NONE REQUIRED.	NONE REQUIRED.
BASIC	PART-TIME ASSISTANT WITH PREPARATION IN RESEARCH AND EVALUATION.	OFFICE SPACE.	ADDITIONAL OFFICE EQUIPMENT.
ADVANCED	ASSISTANT DIRECTOR FOR RESEARCH AND EVALUATION; M.A. PREPARATION WITH BACKGROUND IN COMPUTERS AND INFORMATION MANAGEMENT.	OFFICE SPACE.	COMPUTER TERMINAL AND PROGRAMMING FOR DATA COLLECTION AND ANALYSIS.

6.2.2 A system of continuous user evaluation of the Learning Resources Program, supplemented by periodic in-depth user evaluations, shall exist.

These evaluations should collect data on the scope, quality, effectiveness, and accessibility of all facets of the Learning Resources Program. The system of user evaluation should include procedures for obtaining data from all major categories of Learning Resources Program users AND non-users (i.e., students, faculty, administration, etc.).

6.2.3 The Learning Resources Program staff shall continually evaluate existing services and procedures for quality, cost effectiveness, and efficiency. Recommendations for improvement or revision of policies, procedures, and operations shall be compiled at least yearly.

6.2.4 The Learning Resources Program shall periodically evaluate its progress toward meeting its annual and long-term goals and objectives.

The Learning Resources Program goals and objectives, themselves, should be evaluated annually for their continued support of institutional goals. The relationship of tasks performed by staff to program goals and objectives shall also be studied.

6.2.5 An annual evaluation of the adequacy of existing services and resources shall be conducted.

Based on self-study documents, needs assessments, and data available on program operation, a plan for adding, modifying, or reducing services budget, personnel, equipment, and resources shall be developed. Anticipated levels of utilization and demand shall be considered in planning any service changes.

6.2.6 Research on media and alternative approaches to instruction shall be conducted to assess their effect on learning and their cost effectiveness.

6.2.7 A system of disseminating the results of research on media effectiveness to faculty and the educational community at large shall exist.

6.2.8 The Learning Resources Program shall participate in the collection and sharing of data and research among Learning Resources Programs at other institutions.

CREATIVE/PRODUCTION FUNCTION

Purpose: To plan, prepare, and create a variety of instructional materials for specific academic uses; to assist faculty members in the development and creation of such materials.

This service, comprised of Visualization, Audio, and Combined Media, must of necessity be closely interrelated, for the Combined Media service relies quite heavily on the products/facilities of its partners. The greater the degree of segregation, either physically or administratively, the greater will be the duplication of staff, facilities, and equipment, and the greater the resulting cost to the institution.

6.3 There shall exist a creative/production function within each Learning Resources Program consisting of, at minimum, visualization services and audio services, with combined creative services introduced at the basic criteria level.

The following are components of the function:

Visualization services
- Graphics
- Still photography
- Motion Photography (silent)

Audio services
Combined creative services
  Slide-tape
  Sound motion photography
  Television
  Multi-media

Personnel, facilities, and equipment will vary, and possibly need not be duplicated, depending upon both the demands of the institution and the functional integration of the services of the Learning Resources Program.

Since combined media forms subsume at least three areas, with possible combined forms of these, the three basic areas are addressed at three levels.

6.3.1 Visualization Services

The purpose of Visualization Services shall be for the creation/production of visual materials for instructional purposes used either individually, in series, or in combined creative forms.

CHART 4 STANDARD 6.3.1

Creative-Production Function

Visualization

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME ASSISTANT, NOT LESS THAN 1/2 TIME FTE.	WORKROOM WITH TABLES.	DRY MOUNT PRESS, LIGHT TABLE, LAMINATOR, PAPER CUTTER, TRANSPARENCY MAKER.
BASIC	GRAPHIC ARTIST/PHOTOGRAPHER. DARKROOM ASSISTANT.	ART PRODUCTION STUDIO. DARKROOM AND FINISHING AREA.	DRAFTING TABLES, SYSTEM FOR LETTERING. COPY STAND AND CAMERAS. PHOTO PRINTING, FINISHING AND MOUNTING EQUIPMENT.
ADVANCED	GRAPHIC DESIGNER. PHOTOGRAPHER. CINEMATOGRAPHER. PRODUCTION, DARKROOM, AND FINISHING TECHNICIANS.	ART STUDIO. PHOTO STUDIO. CINEMA STUDIO.	8MM AND 16MM MOTION PHOTOGRAPHY, COLOR PROCESSING, AND ANIMATION EQUIPMENT.

A. Visualization Services - Minimal Criteria
   1. Ability to dry mount
   2. Ability to laminate
   3. Ability to make overhead transparencies

B. Visualization Services - Basic Criteria
All capabilities within the Minimal Criteria, plus:
   1. Ability to produce limited, simple art work

2. Ability to take and print monochrome photographs
3. Ability to photo modify
4. Ability to photograph color slides with outside processing

C. Visualization Services - Advanced Criteria
All capabilities within the Basic Criteria, plus:
1. Ability to produce original art work
2. Ability to animate
3. Ability to do advanced photography
4. Ability to produce 16mm motion photography
5. Ability to do color processing and printing

6.3.2 Audio Services
The purpose of Audio Services shall be for the recording and/or creating of audio materials for instructional purposes used either independently or in combined creative forms.

CHART 5 STANDARD 6.3.2

Creative-Production Function
Audio

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME ASSISTANCE AS REQUIRED.	NONE REQUIRED.	AUDIO RECORDERS AND RELATED EQUIPMENT.
BASIC	PART-TIME ASSISTANTS, NOT LESS THAN 1/2 TIME FTE.	AUDIO STUDIO AND CONTROL ROOM.	TURNTABLES, TAPE DECKS, AUDIO MIXER, AND RELATED EQUIPMENT.
ADVANCED	FULL-TIME AUDIO PRODUCTION STAFF.	EXPANDED AUDIO STUDIO.	FILM SOUND EQUIPMENT. UPGRADED BROADCAST AUDIO SYSTEM.

A. Audio Services - Minimal Criteria:
Ability to perform field recording of lectures, lessons, speeches

B. Audio Services - Basic Criteria
All capabilities within the Minimal Criteria, plus:
1. Ability to duplicate from format to format
2. Ability to create original materials

C. Audio Services - Advanced Criteria
All capabilities within the Basic Criteria, plus:
1. Ability to do film sound production/recording
2. Ability to do multi-channel audio production
3. Ability to produce broadcast-quality recordings

6.3.3 Combined Creative Services
It is recommended that Combined Creative Services be introduced after both visualization and audio services have reached at least the Basic level. Combined Creative Services shall consist of (a) slide-tape services, (b) sound motion picture services, and (c) television services. See Chart Nos. 6, 7, and 8, respectively.

A. Slide-Tape Services - Minimal Criteria
NONE
B. Slide-Tape Services - Basic Criteria
Ability to produce simple programs involving two slide projectors; an audio track, synchronized; dissolve controlled.
C. Slide-Tape Services - Advanced Criteria
All capabilities within the Basic Criteria, plus:
Ability to produce complex programs involving more than two slide projectors; stereophonic sound; complex program controller.

CHART 6 STANDARD 6.3.3

Creative-Production Function
Slide-Tape

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	NONE REQUIRED.	NONE REQUIRED.	NONE REQUIRED.
BASIC	PART-TIME ASSISTANT.	WORK SPACE. ASSEMBLY/PRODUCTION ROOM.	2 SLIDE PROJECTORS, AUDIO TAPE RECORDER/ SYNCHRONIZER, DISSOLVE CONTROLLER.
ADVANCED	PRODUCER SHARED WITH SOUND MOTION PICTURE PRODUCTION.	VIEWING AREA.	ADDITIONAL PROJECTION, CONTROL, AND AUDIO EQUIPMENT.

CHART 7 STANDARD 6.3.3

Creative-Production Function
Sound Motion Picture

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	NONE REQUIRED.	NONE REQUIRED.	NONE REQUIRED.
BASIC	PART-TIME CINEMATOGRAPHER.	EDITING FACILITY.	8MM AND 16MM CAMERAS. EDITING EQUIPMENT.
ADVANCED	PRODUCER SHARED WITH SLIDE-TAPE SERVICES.	SHARED CINEMA STUDIO. SOUND EDITING AND STUDIO VIEWING AREA.	ANIMATION EQUIPMENT.

A. Sound Motion Pictures - Minimal Criteria
NONE
B. Sound Motion Pictures - Basic Criteria
Ability to produce 8mm and 16mm motion pictures with sound over.
C. Sound Motion Pictures - Advanced Criteria
All capabilities within the Basic Criteria, plus:
1. Ability to produce 8mm and 16mm motion pictures with lip-sync sound.
2. Ability to produce animated film.

A. Television - Minimal Criteria
NONE
B. Television - Basic Criteria
1. Ability to produce simple two-camera monochrome in-studio programs.
2. Ability to record single camera remote event (ENG) with simple post-production editing.
C. Television - Advanced Criteria
All capabilities within the Basic Criteria, plus:
1. Ability to produce multi-camera studio programs in color.
2. Ability to produce multi-camera remote (EFP) programs.
3. Ability to do sophisticated post-production editing.

CHART 8 STANDARD 6.3.3

Creative-Production Function
Television

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	NONE REQUIRED.	NONE REQUIRED.	PORTABLE EQUIPMENT AVAILABLE.
BASIC	PRODUCTION ASSISTANT, FULL TIME.	TELEVISION STUDIO-CONTROL ROOM COMPLEX.	STUDIO EQUIPMENT; 2 OR MORE CAMERAS, FILM CHAIN, AUDIO, AND BASIC POST-PRODUCTION EDITING. EFP/ENG MINICAM AND RECORDER SYSTEM.
ADVANCED	ASSISTANT DIRECTOR FOR COMBINED CREATIVE SERVICES. ADDITIONAL PRODUCTION CREW.	COLOR TV STUDIO-CONTROL ROOM COMPLEX. REMOTE PRODUCTION AND TRANSMISSION CAPABILITY.	EFP/ENG 2 CAMERA SYSTEM. SOPHISTICATED POST-PRODUCTION CAPACITY.

6.4 DISTRIBUTION FUNCTION:
Purpose: to make available the materials, equipment, and facilities necessary for the instructional program of the institution to function at a full and appropriate level.

The components of the distribution function are:
equipment,
electronic, and
materials distribution services

6.4.1 Equipment Distribution - Standard
Each Learning Resources Program shall maintain a complement of instructional technology (AV) equipment of sufficient variety and number to satisfy a minimum of 95% of the annual requests for each equipment type.

A. Equipment shall be available to the patron in such a manner as to encourage and facilitate its use.
B. The Learning Resources Program shall provide an easy and convenient mechanism for instructing patrons in the operation of equipment.
C. The Learning Resources Program shall provide mechanisms for developing the skills of the patron relative to the appropriate use of equipment.
D. The Learning Resources Program shall maintain an equipment resource pool, centrally -housed and/or remotely located, which adequately meets instructional program needs.

CHART 9 STANDARD 6.4.1

Distribution Function
Equipment

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	FULL-TIME DISTRIBUTION CLERK AND PART-TIME ASSISTANTS.	OFFICE, STORAGE, AND EQUIPMENT MARSHALLING AREAS.	APPROPRIATE AND ADEQUATE TO MEET 95% OF REQUESTS.
BASIC	FULL-TIME SCHEDULING ASSISTANT.	EXPANDED AREAS.	DELIVERY VEHICLES SUITED TO CAMPUS.
ADVANCED	ASSISTANT DIRECTOR FOR DISTRIBUTION SERVICES. ADDITIONAL ASSISTANTS.	EXPANDED AREAS FOR STAFF AND DELIVERY PERSONNEL.	RADIO-CONTROLLED DELIVERY VEHICLES.

6.4.2 Each Learning Resources Program shall provide the ability to receive and distribute electronic transmissions of information including audio, video, television, and computer, but not necessarily limited to these.

A. Electronic Distribution - Minimal Criteria
   1. One large lecture hall per campus and one classroom per instructional building shall be equipped with permanently installed audio and television distribution equipment.
   2. Origination and distribution of the electronic signal may occur within the immediate area, although distribution from and origination to a central campus location is preferred.
   3. The Learning Resources Program shall be able to provide one or more computer terminals either tied to a central system or of the stand-alone, microcomputer variety.

B. Electronic Distribution - Basic Criteria
All capabilities within the Minimal Criteria, plus:
   1. All large lecture halls and one-half of all classrooms shall be equipped to receive and originate audio and television transmissions.
   2. Origination from and distribution to the remote locations shall occur from a central campus location.
   3. Each campus building shall be equipped with a minimum of one interconnect for computer access.
   4. Central MATV and/or CATV system shall be available for the receipt of off-air and/or cable electronic signals.

C. Electronic Distribution - Advanced Criteria
All capabilities within the Basic Criteria, plus:
   All classrooms, lecture halls, dormitory spaces, lounges, and offices shall be equipped with distribution points for all electronic formats.

CHART 10 STANDARD 6.4.4

Distribution Function
Electronic

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME ASSISTANTS FOR EQUIPMENT DELIVERY.	LOCAL OR CENTRAL (REMOTE) DISTRIBUTION AREA.	VTRs (AS NEEDED). MONITORS. HEAD-END EQUIPMENT.
BASIC	FULL-TIME ASSISTANT FOR FULL CLASS-TIME OPERATION.	CENTRAL ELECTRONIC DISTRIBUTION/RECEPTION FUNCTIONALLY LOCATED WITH TV PRODUCTION CONTROL.	MATV SYSTEM, CAMPUS-WIDE INTERCONNECTION.
ADVANCED	FULL-TIME TECHNICIAN.	EXPANDED AREAS.	COMPUTER INTERCONNECTS AND TERMINALS.

6.4.3 MATERIALS DISTRIBUTION SERVICE - STANDARD

Each Learning Resources Program shall provide a materials distribution procedure specifically designed to distribute non-print resources, as established within the Materials/Resources Function.

A. Such distribution shall include materials/resources which are a part of the Learning Resources Program's collection.

B. Distribution shall also include provision for the acquisition and distribution of materials obtained on a temporary basis from outside sources (e.g. film rentals, ILL, etc.)

C. Such distribution shall endeavor to insure that the materials are available to users on a timely basis within the context of their instructional program.

MATERIALS/RESOURCES FUNCTION
Purpose: The development and maintenance of an active program of identification, evaluation, selection, acquisition, and control of instructional materials.

CHART 11 STANDARD 6.5

Distribution Function

Materials-Resources

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	FULL-TIME CLERK PER 35 HOURS, OR PART.	CENTRAL LIBRARY AREA.	STANDARD LIBRARY (PER ACRL STANDARDS).
BASIC	PROFESSIONAL LIBRARIAN.	SAME.	SAME.
ADVANCED	ADDITIONAL FULL-TIME CLERKS AND PROFESSIONAL STAFF AS APPROPRIATE.	SAME.	SAME.

Materials/Resources Function - Standard
6.5 Each institution shall maintain an active Materials/Resources Program.

A. Such a program may be carried forth under the auspices of the Learning Resources Program or the academic library; however, under no circumstances shall both entities operate duplicate programs.

B. In the event the Learning Resources Program is responsible for the Materials/Resources, the holdings within the collection shall be shown within the public catalog of the academic library. In the event the academic library is responsible for the Materials/Resources Program, all holdings shall be shown in a public catalog housed within the Learning Resources Program facilities.

C. It is strongly recommended that the Materials/Resources Program be a joint and unified venture between the Learning Resources Program and the library.

D. Preview equipment of not less than one item for each type of material within the collection shall be maintained within the immediate area of the collection.

E. In addition to the standards contained herein, the Standards for College Libraries of the Association for College and Research Libraries (ACRL) are endorsed.

F. Each Materials/Resources Program shall maintain an active program of interagency temporary acquisitions, including materials rental, interagency loan (ILL), and networking/consortia arrangements as appropriate.

Materials/Resources Program - Minimal Criteria
1. An annual materials purchase and/or rental budget of not less than $100 per faculty member (in 1980 dollars).
2. A collection consonant with ACRL standards.

Materials/Resources Program - Basic Criteria
1. An annual materials purchase and/or rental budget of not less than $250 per faculty member (in 1980 dollars).
2. A collection consonant with ACRL standards.

Materials/Resources Program - Advanced Criteria
1. An annual materials purchase and/or rental budget of not less than $500 per faculty member (in 1980 dollars).
2. A collection consonant with ACRL standards.

At all criteria levels, the size of the facilities and the quantity of shelving and staff, etc., is assumed to be adequate to support the existing activities/resources plus an expansion potential of not less than 33%. In all instances, collection figures shall reflect ACRL standards.

6.6 Maintenance and Engineering function

Purpose: To provide a comprehensive program of preventive maintenance and repair of equipment associated with the Learning Resources Program; to maintain the capacity to design, construct, and operate systems of equipment.

Maintenance and Engineering - Standards

6.6.1 Each Learning Resources Program shall maintain, or have easy access to, facilities, personnel, supplies, and equipment necessary to repair equipment.

6.6.2 Each Learning Resources Program shall provide routine maintenance checks on all equipment items on a regular and scheduled basis.

6.6.3 Each Learning Resources Program shall have access to the expertise necessary to design equipment systems (multiple items functioning together for a unique purpose/function).

6.6.4 Each Learning Resources Program shall have on staff individuals qualified and trained to operate each equipment type and system under the jurisdiction of the Learning Resources Program.

CHART 12 STANDARD 6.6

Maintenance and Engineering Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME TECHNICIAN.	SMALL REPAIR SHOP.	BASIC TOOLS AND TEST EQUIPMENT.
BASIC	FULL-TIME TECHNICIAN. FIELD ASSISTANTS FOR CLEANING AND INSPECTION.	EXPANDED SHOP.	SPECIALIZED TOOLS AND TEST EQUIPMENT.
ADVANCED	FULL-TIME ENGINEER AND STAFF.	EXPANDED SHOP, OFFICE, STORAGE, AND CONSTRUCTION AREAS.	SOPHISTICATED ELECTRONIC TEST EQUIPMENT. EQUIPMENT FOR DEVICE FABRICATION.

Maintenance and Engineering - Minimal Criteria:

1. Contract services with an agency specializing in the repair of equipment.
2. A system of preventive maintenance (including inspection following use) for all equipment.
3. A budget adequate for the repair of all items as necessary.

Maintenance and Engineering - Basic Criteria:
All minimal capabilities, plus

1. A basic maintenance and repair facility equipped with appropriate tools, test equipment, manuals and supplies to perform repairs on all non-solid-state equipment.
2. Technician capable of performing adequately under this section, and capable of designing and operating simple equipment systems.

Maintenance and Engineering - Advanced Criteria:
All Basic Capabilities, plus

1. An advanced maintenance and repair facility equipped with sophisticated electronic test equipment adequate to maintain and repair all equipment types.
2. Technicians capable of repairing all equipment types, plus the designing, installation, and operation of complex equipment systems.

7. BUDGET - STANDARDS

The Learning Resources Program budget is a financial expression of its objectives, of its activities, and of its program. It should be a realistic reflection of financial support required to accomplish the objectives formulated in accordance with the guidelines and standards described herein. With this in mind, the following standards are provided.

7.1 The responsibility for budget preparation and administration rests with the chief administrator of the Learning Resources Program.

The chief administrator of the program shall solicit fiscal information from each service unit of the Learning Resources Program (i.e. Creative Production, Distribution, Developmental, Materials/Resources, Maintenance and Engineering, Research, Evaluation, and Development components). The Learning Resources Program budget shall reflect the programmatic needs and objectives of these units.

The chief administrator of the institution shall provide the chief administrator of the Learning Resources Program sufficient time to prepare and present the budget. Once accepted, no adjustment or reallocation of funds shall occur without appropriate consultation with those affected.

7.2 The Learning Resources Program budget shall be expressed in terms of its relationship to the total institutional budget.

The status of the Learning Resources Program will vary widely from institution to institution. However, if a college or university is to be provided with the MINIMAL services outlined in these Standards, then a total budget of not less than 3% of the institution's total budget for educational and general expenditures will be required. This percentage will be higher in cases where the institution is attempting to establish or expand a Learning Resources Program that has essentially been non-existent or below minimal levels. The percentage is exclusive of the budget allotments needed for materials acquisition such as periodicals, films, tapes, books, etc.

There shall also be means by which the Learning Resources Program can obtain additional funding in order to support new or special programs as well as provide for long-range planning. An example of those areas which may have significant impact on the Learning Resources Program budget include, but are not limited to, the following:

A. Change in scope or level of curricula
B. Change in an instructional approach
C. Development of individualized learning modules for broad areas of curricula which rely heavily on media
D. Change in the student body and/or teaching faculty, either by size or composition
E. Need to incorporate new technology
F. Inflation.

7.3 Adequate financial records shall be maintained by or be made accessible to appropriate personnel within the Learning Resources Program.

Informative and current financial information is obviously required if efficient expenditure, appropriate planning, and proper control of the Learning Resources Program budget is to occur. Additional staff may be required for the Learning Resources Program to maintain necessary internal accounts for approving payment of invoices, monitoring encumbrances, and tracking the general flow of expenditures.

7.4 Acquisition and selection of new and replacement equipment shall be done on a systematic basis and in accordance with institutional procedures.

New equipment purchases shall be based on the objectives and services described in the above Standards. There will be a need to replace equipment as it becomes worn and outdated. This should be done on a systematic basis. Federal government standards provide for a six-year life expectancy for portable items and twelve years for permanently installed equipment. In view of this, an annual equipment replacement budget factor of 12% is recommended for Learning Resources Programs.

7.5 The Learning Resources Program budget shall be a part of the larger institutional budget and shall not be based on revenue generated by a recharge system.

It is difficult, if not impossible, to adequately and systematically plan a Learning Resources Program whose budget is based solely on a charge-back system. Such a system tends to discourage departments and faculty members from fully utilizing Learning Resources Program services. There is great temptation on the part of user departments to acquire duplicate resources to circumvent the economics of the charge-back system. The expense of "shuffling paper" between departments, the Learning Resources Program, and the institution's business office is a significant hidden drain on the financial resources of the institution.

In some cases fees may be charged for services contracted for repairing equipment, producing graphics, and using expendable materials. However, funds derived from such sources should be considered as a supplement to, rather than the basis of, the Learning Resources Program budget.

7.6 Where appropriate, the Learning Resources Program shall seek outside sources of funding, such as endowments, gifts, grants, etc. Such source of income will serve to enhance long-range planning and allow for necessary flexibility and growth. In cases where applicable law and policies permit, and where the academic and other missions of the Learning Resources Program will not be affected, service and rentals to non-institutional individuals and entities may be conducted, and the funds acquired therefrom shall be available to the Learning Resources Program in the least restricted manner possible for improvement of the program.

8. ADMINISTRATION - STANDARDS

Learning resources need to be accessible, distributed, used, and creatively developed by persons ultimately responsible to the chief administrator of the institution. With an integrated Learning Resources Program, authority for these tasks would be centralized; with separated functions, the responsibility for these tasks would be decentralized.

As pointed out earlier, each institution is unique in its organizational form. Consequently, the following standards are relevant to administering an integrated Learning Resources Program. Indeed, they are probably relevant to most decentralized programs, but some institutions will need to deviate from the standards. In such cases, however, variant procedures should be supported by reasons directly related to institutional objectives.

The administrative section has as its major responsibility, the orderly functioning of the other units of the Learning Resources Program. Included in this responsibility is the provision of appropriate working spaces, office, secretarial, and bookkeeping activities, provision of office supplies; and preparing and accounting for orders and other communications within and outside the Learning Resources Program, and other typical functions that must be carried out within every institutional agency. This unit is directed by the Chief Administrative Officer of the Learning Resources Program, and is primarily a support unit for the rest of the units of the program.

8.1. Specific standards for the Learning Resources Program include:

A. Space
  (1). office - one per FTE professional staff member
  (2). appropriately equipped work station - one per staff member
  (3). conference space
B. Equipment
  (1) telephones - one per professional staff member, plus one per service area
  (2) typewriters - one per every two staff members
C. Secretarial - one per five staff members or part thereof
D. Bookkeeping as needed

8.2. The Chief Administrative Officer's duties and responsibilities are as follows:

A. The Chief Administrative Officer of the Learning Resources Program shall report directly to the institution's Chief Academic Officer.

In smaller institutions, this person may report directly to the President or chief executive. Furthermore, some institutions have unique organizational objectives where Learning Resources Programs would not be included in the same way that they would be included in the traditional academic structure of most institutions. Nevertheless, the Learning

Resources Program shall occupy a position at a sufficiently high level in an institution's table of organization to allow it to assist the institution in accomplishing its instructional goals and objectives.

B. Qualifications of the Chief Administrative Officer shall include:
(1) Experience and success in similar positions at an equal or lower level.
(2) Demonstrated leadership qualities and an innovative attitude.
(3) Earned doctorate with training in administration and management science, learning communication theory, systems analysis and design, curriculum and instructional development, and information science.

These criteria place emphasis on a wide range of training which might severely limit the number of candidates. The Chief Administrative Officer of a Learning Resources Program should be evaluated more on performance and potential to manage than on scholarly activity or specific technical training. The candidate's conceptual skills should be considered before technical skills; human relations skills should be the most critical factor.

C. The Chief Administrative Officer of the Learning Resources Program shall be responsible for analyzing and describing the institution's need for learning resources.

In order for the Learning Resources Program to be effective, services and resources need to be designed to be congruent with institutional and environmental needs.

D. The Chief Administrative Officer of the Learning Resources Program shall be responsible for analyzing current learning resources, describing Learning Resources Program goals and objectives, and defining strategies.

Identifying what people, materials, equipment, space, time, funds, etc., are available is the same as identifying where a program is at a given point in time. When goals and objectives are described, they show where the program wants to be. When institutional and environmental factors are considered, they show where the program NEEDS to be. Strategies define what options are available, given the institution, the environment, and the resources available.

E. An organizational plan shall be designed and disseminated outlining channels of communication, lines of responsibility, and relationships among the functions of the Learning Resources Program, and between the Learning Resources Program and the academic program of the institution. Job descriptions, organizational charts, time schedules, floor plans, policies and procedures are examples of organizational plan components.

F. The Chief Administrative Officer of the Learning Resources Program shall be responsible for maintaining, developing, and regulating human resources of the Learning Resources Program.

Staffing the Learning Resources Program requires attention to hiring persons with the necessary skills, motivating and developing them as individuals and when necessary, terminating their employment. Affirmative action programs, staff development programs, and the administrator's own development program are all staffing concerns.

G. Professional staff members of the Learning Resources Program shall hold rank, appointment, and responsibilities commensurate with similar academic and administrative positions.

H. The responsibility for controlling the resources of the Learning Resources Program rests with its Chief Administrative Officer.

In order to know if objectives have been reached, control indicators need to be identified and recorded. Utilization statistics provide indication of changes in service programs. Budgets offer a control device on spending. Receipts, invoices, deposit slips indicate financial transactions and guard against theft. Security of materials collections and equipment systems, as well as personal protection of staff and users, are also a responsibility of the Chief Administrative Officer.

SECTION III. EVALUATION AND DATA COLLECTION

Task Force II was given the following additional assignment: Develop an instrument, recommend the mechanism for, and monitor the collection of data representing the state-of-the-art of post-secondary Learning Resources Programs, including data on such components as staff, facilities, budget, services, resources, etc.

A. INTRODUCTION

Members of Task Force II concerned with the assignment above felt that not only should the data collected be a record of activities and resources, but also serve as a planning and forecasting document. A process model, further described in Appendix A, has been used to focus data collection, as well as institutional needs identification, on Learning Resources Program objectives. These data, when analyzed in concert with the evaluated needs of the institution, should provide appropriate information to write meaningful objectives, create an effective management plan, and do those other things that need to be done to provide a useful and effective Learning Resources Program.

The instrument is a tool; it is not an answer in itself. Emotions, feelings, political considerations, and practices of persons within the institution weigh heavily in the operation of the Learning Resources Program.

B. THE INSTRUMENTS

In order to provide better use of the quantitative data as collected by the Learning Resources Program Profile (found in Appendix A), a guide for self study was devised and appears in that section. These instruments should expand and reinforce the data as well as offering processing links to the standards offered previously in this paper.

Once the data has been gathered and the external evaluators arrive on site, the institutional check sheets, Standards for Learning Resources Programs, shall be used. Please refer to Appendix B.

C. PROVIDING A MECHANISM FOR PUBLICATION OF DATA

The data collection instrument, or profile, shall be completed annually as of the last day of the program's fiscal year. Submission of this profile to AECT could be done annually, either as documentation or as part of a national report.

The self-study instrument has not been designed to elicit information for publication. However, it should be available to any evaluation or accreditation team visiting a Learning Resources Program. Furthermore, it could be very useful in an institution's own evaluation or for a program administrator's self-evaluation.

D. MONITORING THE COLLECTION OF DATA FOR PUBLICATION

Data received should be in machine-readable format so that reports can be handled efficiently. Computer programs designed to list data and compute critical ratios and levels of services, as well as to identify significant relationships among classes of data, would be helpful in providing additional information to Learning Resources Program managers. This computed information should be part of a widely distributed publication.

APPENDIX A

Learning Resources Program Profile

Association for Educational Communications & Technology
1126 Sixteenth Street NW, Washington, D.C. 20036

I. Learning Resource Program

A. Name of Reporting/Center/Department

Year Founded

Name of Reporting Chief Administrator

Address

City/State/Zip

Phone

B. Type of Learning Resource Program (LRP)
The reporting LRP best relates to its institution as which of the following?

___ 1. A Specialized Part of Entire LRP
___ 2. College or Department Centered LRP
___ 3. A Branch Campus LRP
___ 4. A Main Campus LRP
___ 5. A Multi-Campus LRP
___ 6. Other (Please Specify)

C. Name(s) and Address(es) of Other LRP Unit(s) **NOT** Included in This Report But Part of the Institutional Program

D. Total Current Annual Budget of LRP $_____

E. Clients

1. Number of Faculty who have access to **THIS** LRP's services _____ _____
2. Number of Faculty who use LRP services _____ _____
3. Number of Students who have access to **THIS** LRP's services. _____ _____
4. Number of Students who use LRP services. _____ _____
5. Number of Other Clients. _____ _____

F. Services Offered

1. Materials Collection yes ____ no ____
2. Materials Production yes ____ no ____
3. Equipment Distribution yes ____ no ____
4. Instructional Development yes ____ no ____

List any services which are unique or outstanding.

II. Institution

A. Name of Institution

Year Founded

B. Type of Institution

___ 1. Junior or Community College
___ 2. Four Year College
___ 3. University with Graduate Programs
___ 4. Post-Secondary Regional Authority
___ 5. Other (Please Specify).

C. Total Current Annual Budget of Institution
$

D. Total Current Academic/Instructional Budget
$

E. Number of Faculty (Include part-time faculty if they have equal access to services offered.)

F. What is the full-time equivalent (FTE) student enrollment of the above institution?

1. Undergraduate, Associate _____
2. Undergraduate, Baccalaureate _____
3. Graduate _____
4. Professional _____
5. Extension _____
6. Continuing Education _____
7. Other (Please Specify) _____

8. Total FTE

G. Total Number of Students (Actual) Enrolled

G. Space

Number of Usable Square Feet of Floor Space

H. Staffing

1. The LRP Chief Administrator Reports to Whom?

2. The LRP Chief Administrator is how many levels away from the President?

3. What is the total number of Full-Time Personnel (in whole numbers)?

4. What is the total number of Part-Time Personnel (in whole numbers)?

5. What is the total number of Full-Time Equivalent (nearest tenth) Part-Time Personnel?

A-2

III. Personnel

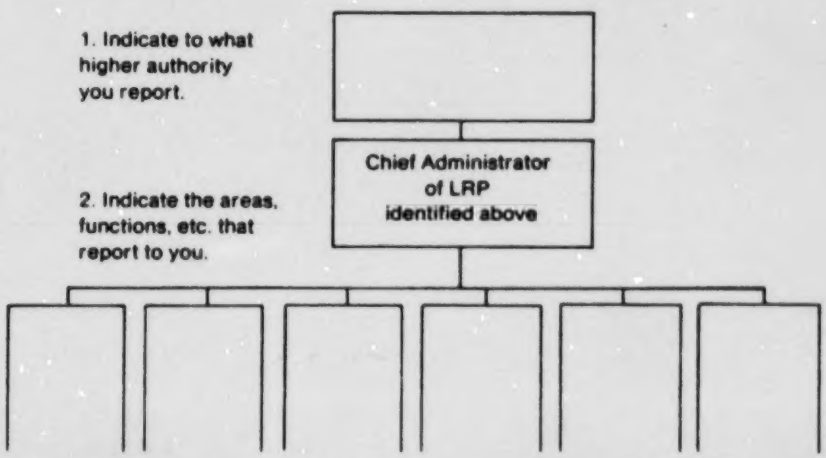
Please indicate the number of persons on the LRP budget. Also indicate the percent of time each personnel classification does the specified LRP tasks	Number of Full-time Personnel (In whole numbers)	Part-time Personnel		Indicate Percentage of Time Staff Spend in the Following Areas of Activity					
		Number in Whole Numbers	Full-time Equivalent (Nearest tenth)	Material Collections	Production of Materials	Distribution/ Utilization of Equipment	Instructional Development	Management/ Administrative	Other
Chief, Deputy, Associate and Assistant Chief Administrators									
Faculty on LRP Budget									
Librarians on LRP Budget									
Other Professional Staff on LRP Budget									
Technical, Clerical, and Other Supporting Staff on LRP Budget									
Graduate Assistants on LRP Budget									
Student Assistants on LRP Budget									
Other									

Organization Chart

1. Indicate to what higher authority you report.

2. Indicate the areas, functions, etc. that report to you.

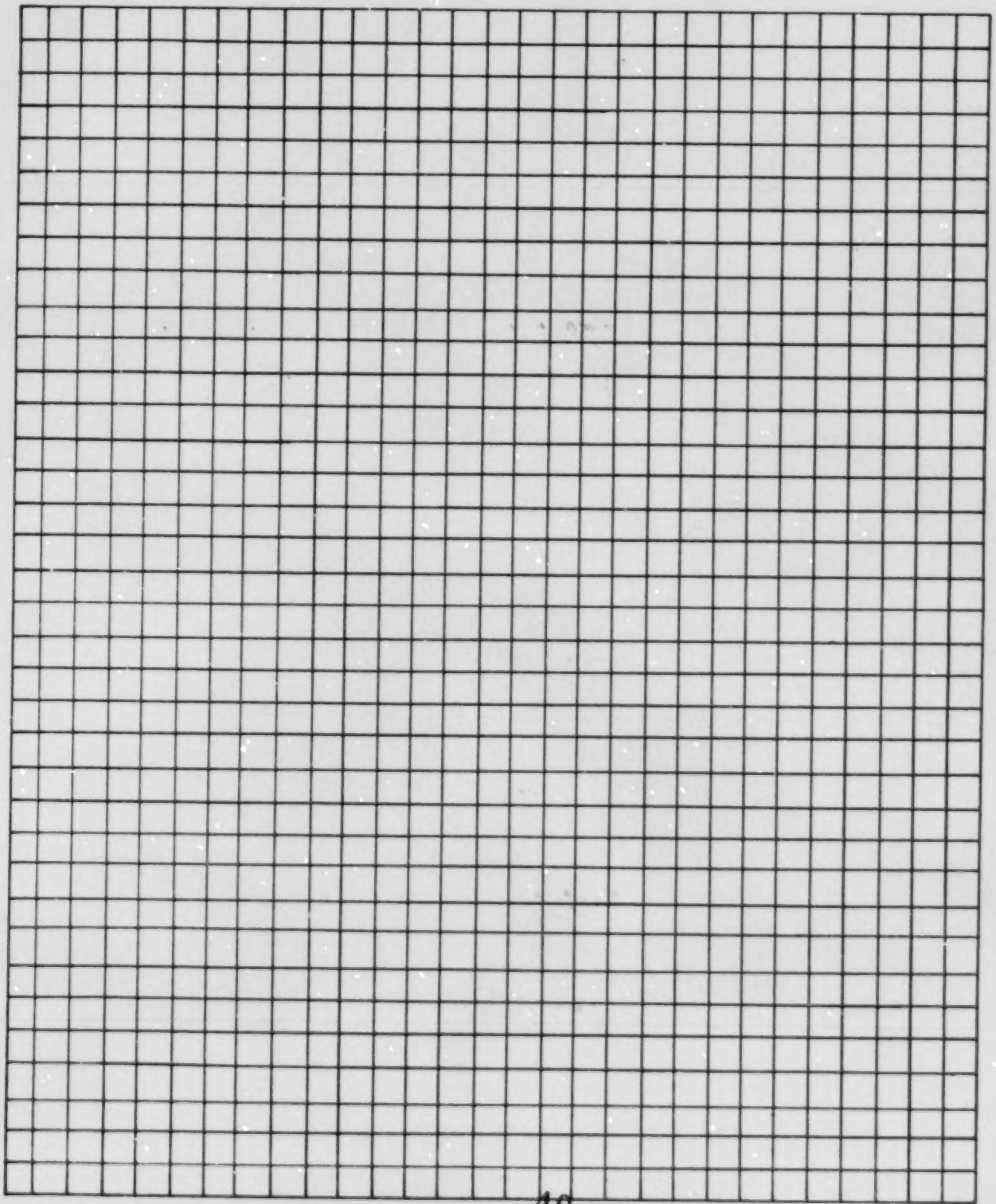
3. **OR** include a copy of your organization chart.



IV. Facilities

This Learning Resources Program occupies approximately how many usable square feet of space? _____

Drawing of Floorplan *scale:* 1/4 *inch* = _____ **OR** include a copy of your floorplan(s)



V. Learning Resource Program Services Offered/Resources Available

V.A. Scheduling and Distributing Resource Materials

Please indicate how many units of material are available, how many times per year they are used and what percent of total circulation is done by which patron groups	Number of Units of Material Owned	Number of Units of Material Borrowed	Estimated Annual Circulation Out of Building	Percent Circulated to Following Groups: Instructor	Student	Staff	Community	I L L	Other
Sample 16mm Motion Picture Films	650	225	919	65%	10%	10%	10%	5%	
				%	%	%	%	%	%
Books									
Bound Periodicals									
Unbound Periodicals									
Documents									
Printed Maps/Charts/Prints									
Photographs									
Slides									
Filmstrips									
Microform Reels/Cards									
Overhead Transparencies									
8mm Motion Picture Films									
16mm Motion Picture Films									
Records									
Audio Tapes									
Video Tapes									
Video Discs									
Slide/Tape Programs									
Computer Programs									
Academic Games/Simulations									
Realia, Models, Mock-ups									
Exhibits									
Other									

V.B. Scheduling and Operating a Telecommunications System

Please indicate with a ✓ which patron group can use which systems. Also, please indicate the estimated replacement value and use of the available systems.	Number of Systems	Total Number of Persons Served Annually	Estimated Replacement Value of System(s)	Instructor	Student	Staff	Community	Other
Broadcast Radio			$					
Broadcast Television								
Closed Circuit Television								
Telephone System (Speakerphone, etc.)								
Postal or Mail (Facsimile) Service								
Satellite System								
Microwave System								
Cable System								
Other System								

V.C. Scheduling and Operating an Individualized Learning Facility

Please indicate with a ✓ which patrons can use which facilities. Also, please indicate the capacity and use of the available facilities.	Number of Facilities	Seating Capacity of Facilities	Total Number of Persons Using Annually	Instructor	Student	Staff	Community	Other
Individualized Learning Center								
Listening Center								
Computer-Assisted Instruction								
Language Laboratory								
Carrel System (Mediated)								
Dial Access Listening								
Videotape Viewing								
Wireless Audio System								
Other								

V. Learning Resource Program Services Offered/Resources Available (Continued)

V.D. Scheduling and Distributing Portable Media Equipment

Please indicate how many units of each equipment type is available and estimate how many times per year they are used. Also, please indicate with a checkmark what equipment is available to which patrons.	Number of Units of Equipment	Total Number of Uses Annually	Patron Pick-up and Return			Staff Delivery			Staff Remote Site Delivery			
			Instructor	Student	Staff	Instructor	Student	Staff	Instructor	Student	Staff	Other
Sample Record Player	32	247	✓	✓	✓	✓			✓			
2" x 2" Slide Projector												
Overhead Projector												
Microform Reader												
8mm Projector												
16mm Projector												
Record Player												
Portable Public Address												
Audio Tape Recorder (Cassette)												
Audio Tape Recorder (R-to-R)												
Self-contained Slide/Tape Unit												
VTR 1/2" Cassette or R-to-R												
VTR 3/4" Cassette												
Videodisc Player												
VTR 1" Tape R-to-R												
Video Projector												
Facsimile Rcvr/Transmitter												
Portable Classroom Furniture												
Typewriter												
Office Copier												
Computer Terminal (Hardcopy)												
Computer Terminal (CRT)												
Microcomputer												
Speech Compressor												
Camera, Still												
Camera, Motion Picture (Film or Video)												
Easels, Flip-Charts, Display Boards												
Telelecture Equipment												
Other												

V.E. Operating a Group Presentation Facility

Please indicate number, responsibility, quality and estimated value of media equipment in group presentation facilities.	Total Number of Facilities of Institution	Total Number of Facilities That are Responsibility of LRP	Percent with Projection Surfaces Available	Percent with Incident Light Control	Value of Permanently Assigned Media Equipment
Sample Classroom	50	2	90%	75%	$25,000
			%	%	$
Auditorium					
Theatre					
Classroom					
Seminar Room					
Laboratory					
Conference Room					
Other					

V. Learning Resource Program Services Offered/Resources Available (Continued)

V.F. Producing Resource Material

Please indicate with a ✓ what type of production facilities are available to fulfill indicated needs. Also estimate the volume of materials produced annually and the number of staff hours used annually	Self-Production Area(s)					Percent of Total Units Produced by Staff for the Following						Total Number of Units Produced Annually	Total Number of Staff Hours Annually (Answer only major headings as indicated)
	Instructor	Student	Staff	Anyone	Other	Classroom Instruction	Instructional Dev. Proj	Research Project	Public Affairs	Community	Other		
Sample Color Slides	✓	✓	✓	✓		50%	30%	5%	10%	5%		12,000	
Producing Artwork						%	%	%	%	%	%		hrs
Original Illustrations and Drawings													
Original Charts and Graphs													
Original Cartoons													
Animation Cels and Artwork													
Signs													
Layouts													
Paste-Up													
Computer Graphics													
Other													
Producing Photographic Materials													hrs
B&W Negatives													
Color Negatives													
B&W Prints													
Color Prints													
B&W Slides													
Color Slides													
Overhead Transparencies													
8mm Motion Pictures													
16mm Motion Pictures													
Microforms													
Filmstrips													
Student and/or Faculty IDs													
Other													
Producing Printed Materials *(Other than for internal usage)*													hrs
Typesetting													
Mimeo and/or Ditto Reproduction													
Xerographic Reproduction													
Offset Reproduction													
Letterpress Reproduction													
Ozalid Reproduction													
Silkscreen Reproduction													
Binding													
Computer Printer													
Word Processing													
Electronic Stencil Cutting													
Other													
Producing Audio Materials													hrs
Reel to Reel Tape (Master)													
Cartridge Tape (master)													
Cassette tape (Master)													
Audiotape Duplication													
Slide/Tape Program Production													
Multi-image production													
Other													

V.F. Producing Resource Material (Continued)

Please indicate with a ✓ what type of production facilities are available to fulfill indicated needs. Also estimate the volume of materials produced annually and the number of staff hours used annually	Self-Production Area(s)					Percent of Total Units Produced by Staff for Following:							Total Number of Units Produced Annually	Total Number of Staff Hours Annually (Answer only major headings as indicated)
	Instructor	Student	Staff	Anyone	Other	Classroom Instruction	Instructional Dev. Proj.	Research Projects	Public Affairs	Community	Other			
Video Materials Production						%	%	%	%	%	%			hrs
Video Tape:Broadcast														
Videotape:Non-Broadcast														
Film-tape Conversion														
R-to-R Tape Duplication														
Cassette Tape Duplication														
Broadcast Tape Reproduction														
Post-Production (Editing, etc.)														
Other														
Special Production Facilities														hrs
Audio Studio														
Video Studio														
Motion Picture Studio														
Remote Van														
Other														
Three-Dimensional Production														hrs
Displays														
Models														
Sets														
Furniture														
Other														

V. G. Development

	ADVICE -No. of clients served by single phone call or visitation.	MORE THOROUGH CONSULTATION -requiring several meetings, little preparation.	SIMPLE PROJECT requiring less than 40 hours of time.	COMPLEX PROJECTS-requiring more than 40 hours of time.
Developing Material Resources				
Materials Production Development				
Equipment Systems Development				
Instructional Development				
Management Development				
Organizational Development				
Community Development				
Other Development (Please Specify)				

A-8
VI. Finance

(Source and Use of Funds) **ANNUAL BUDGET 19 /19**

Source of Funds

Internal Sources

Instructional and General (I&G) Appropriation $ _____

Earnings Account (Credit Received for Services) $ _____

Rotary Account (Account not deleted at end of year) $ _____

Stores Account (Merchandise on shelf equals any negative balance) $ _____

Other Internal Sources $ _____

External Sources

Grants and Contracts $ _____

Federal Funds _____

Research _____

Film Rental _____

Other External Sources _____

Total Annual Revenue $ _____

Use of Funds

Salaries

Faculty and Administrative Staff $ _____

Staff _____

Fringe Benefits _____

Student Staff _____

Equipment Purchases _____

Resource Materials _____

Supplies

Film Rental _____

A-V Parts, Lamps _____

Art Supplies _____

Photo Supplies _____

Television Supplies _____

Library Supplies _____

Office Supplies _____

Other Supplies _____

Other Expenses

Travel Expenses _____

Telephone Expenses _____

Computer Expenses _____

Contract Expenses _____

Vehicle Expenses _____

Insurance Expenses _____

Postage Expenses _____

Other Expenses _____

Total Annual Expenses $ _____

(Balance Sheet) **CURRENT VALUE STATEMENT** (As of last day of fiscal year)

Cash (If funds remain in LRP for use next year) $ _____

Accounts Receivable _____ _____

Endowment, Trust Funds, Holdings _____ _____

Material Collection(s) -Original Cost minus Accumulated Depreciation _____ _____

Equipment -Original Cost minus Accumulated Depreciation _____ _____

Instructional Development Projects —Original Cost minus Accumulated Depreciation _____ _____

Other Assets _____ _____

Subtotal - Total Assets _____ $ _____

Accounts Payable _____ $ _____

Long-Term Lease Agreements _____ _____

Other Obligations _____ _____

Subtotal - Total Liabilities _____ _____

Current Value (Total Assets minus Total Liabilities) $ _____

Estimated Replacement Value
Material Collections $ _____
Equipment _____
Other assets _____
Total Estimated Replacement Value $ _____

APPENDIX B

Institutional
Self-Evaluation
Standards for Learning Resources Programs

The following is a self-evaluation inventory to assist in the identification of the appropriateness of the institution's Learning Resources Program.

In order to complete the inventory it will be necessary to have a copy of the standards to work with since the categories are identified only by standard number.

For each standard listed place a check mark on the appropriate line if the institution, in your judgement, meets or exceeds the standard. Place no check if any part of the standard is not met totally. Total score may be obtained by adding numbers in ( ) for each item checked.

5.1. GENERAL STANDARDS (NOTE: numbers below refer to standards listed in main text of this document.)

5.1.A Consistent _____ (5)
5.1.C Responsive _____ (5)
5.1.D Accountable _____ (5)
5.1.B Expanded Scope _____ (3)
5.5 General Resources _____ (5)
5.6 Primary Role _____ (2)
5.7 Quality _____ (2)
5.8.A Adequate Budget _____ (5)
5.8.B Separate Budget _____ (3)
5.9.A Professional Status _____ (5)
5.9.B Professional Development _____ (5)
5.10 Adequate Staffing _____ (5)

Total Score _____ of 50 possible

6.2 STANDARDS FOR RESEARCH AND EVALUATION FUNCTIONS

6.2.1 Clear Procedures Stated _____ (5)
6.2.2 Qualitative Data _____ (5)
User Attitude _____ (5)
User Evaluations _____ (5)
6.2.3 Continuing Evaluation _____ (5)
6.2.4 Periodic Goals Evaluation _____ (5)
6.2.5 Annual Adequacy Evaluation _____ (5)
6.2.6 Research _____ (5)
6.2.7 Information Dissemination _____ (5)
6.2.8 Data Sharing _____ (5)

Total Score _____ of 50 possible

6.1 STANDARDS FOR DEVELOPMENTAL FUNCTIONS:

Existing clearly defined program _____ (25)
Reduced Faculty Load _____ (25)

Total Score _____ of 50 possible

6.3 STANDARDS FOR CREATIVE/PRODUCTION FUNCTIONS

6.3.1 Visualization Services
Advanced Criteria Met _____ (10)
Basic Criteria Met _____ (6) Check one only
Minimal Criteria Met _____ (2)

6.3.2 Audio services
Advanced Criteria Met _____ (10)
Basic Criteria Met _____ (6) Check one only
Minimal Criteria Met _____ (2)

6.3.3.A Slide-tape (Combined) Services
Advanced Criteria Met _____ (10)
Basic Criteria Met _____ (6) Check one only
Minimal Criteria Met _____ (2)

6.3.3.B Sound Motion Picture Services
Advanced Criteria Met _____ (10)
Basic Criteria Met _____ (6) Check one only
Minimal Criteria Met _____ (2)

6.3.3.C Television Services
Advanced Criteria Met _____ (10)
Basic Criteria Met _____ (6) Check one only
Minimal Criteria Met _____ (2)

Total Score ____ of 50 possible

6.4 STANDARDS FOR DISTRIBUTION FNCTIONS

Equipment Distribution Services:

6.4.1 95% minimum satisfaction level met _____ (10)

6.4.1.B Patron Instruction _____ (5)

6.4.1.C Patron Skill Development _____ (5)

6.4.1.D Equipment Resources:

Advanced Criteria Met _____ (15)
Basic Criteria Met _____ (10) Check one only
Minimal Criteria Met _____ (5)

6.4.2 Electronic Distribution Services:

Advanced Criteria Met _____ (15)
Basic Criteria Met _____ (10) Check one only
Minimal Criteria Met _____ (5)

6.4.3 Materials Distribution Services:

Existing Permanent Collection _____ (5)
Temporary Acquisitions _____ (5)
Availability _____ (5)

Total Score _____ of 65 possible

6.5 STANDARDS FOR MATERIALS/RESOURCES FUNCTIONS

6.5.A Non-duplication of services _____ (3)
6.5.B Common Public Catalogs _____ (5)
6.5.C Unified with Academic Library _____ (10)
6.5.D Preview Equipment _____ (5)

Overall Standards:

Advanced Criteria Met _____ (25)
Basic Criteria Met _____ (15) Check one only
Minimal Criteria Met _____ (5)

Expansion Potential _____ (5)

Total Score _____ of 48 possible

6.6 STANDARDS FOR MAINTENANCE AND ENGINEERING FUNCTION

Regularly Scheduled Maintenance _____ (10)
Access to System Designer _____ (2)
Systems Operators _____ (5)

Overall standards:

Advanced Criteria Met _____ (10)
Basic Criteria Met _____ (6) Check one only
Minimal Criteria Met _____ (2)

Total Score _____ of 42 possible

8. Standards for Personnel, Facilities, and Equipment:

The following items are from charts 1 through 12 for each standards. Place a check mark opposite the criteria level you meet totally.

NOTE: The chart numbers below do NOT correspond directly to the Charts in the main text of this Document.

A. General (Chart 1)

	Personnel	Facilities	Equipment
Minimum	(5)	(3)	(3)
Basic	(10)	NA	NA
Advanced	(15)	(3)	(3)

Total Score____of 21 possible.

B. Research & Evaluation (Chart 2)

	Personnel	Facilities	Equipment
Minimum	(1)	NA	NA
Basic	(5)	(3)	NA
Advanced	(15)	(3)	(5)

Total Score____of 23 possible.

C. Developmental (Chart 3)

	Personnel	Facilities	Equipment
Minimum	1/2 time (5)	NA	NA
Basic	(15)	(5)	(3)
Advanced	(25)	(15)	(5)

Total Score____of 45 possible.

D. Visualization (Chart 4)

	Personnel	Facilities	Equipment
Minimum	(1)	(1)	(5)
Basic	(10)	(5)	(10)
Advanced	(25)	(15)	(15)

Total Score____of 55 possible.

E. Audio (Chart 5)

	Personnel	Facilities	Equipment
Minimum	(0)	NA	(2)
Basic	(3)	(5)	(5)
Advanced	(10)	(10)	(10)

Total Score____of 30 possible.

F. Slide Tape (Chart 6)

	Personnel	Facilities	Equipment
Basic	(10)	(1)	(5)
Advanced	(10)	(5)	(10)

Total Score____of 25 possible.

G. Sound Motion Pictures (Chart 7)

	Personnel	Facilities	Equipment
Basic	(5)	(5)	(5)
Advanced	(10)	(10)	(10)

Total Score____of 30 possible.

H. Television (Chart 8)

	Personnel	Facilities	Equipment
Basic	(10)	(10)	(15)
Advanced	(25)	(20)	(20)

Total Score____of 65 possible.

I. Equipment Distribution (Chart 9)

	Personnel	Facilities	Equipment
Minimum	(5)	(5)	NA
Basic	(10)	(10)	NA
Advanced	(25)	(15)	NA

Total Score____of 40 possible.

J. Electronic Distribution (Chart 10)

	Personnel	Facilities	Equipment
Minimum	(1)	(2)	(10)
Basic	(1)	(5)	(20)
Advanced	(10)	(10)	(25)

Total Score____of 45 possible.

K. Material Resources (Chart 11)

	Personnel	Facilities	Equipment
Minimum	(10)	(10)	(5)
Basic	(20)	(10)	(5)
Advanced	(30)	(10)	(5)

Total Score____of 45 possible.

L. Maintenance & Engineering (Chart 12)

	Personnel	Facilities	Equipment
Minimum	(5)	(5)	(5)
Basic	(10)	(7)	(10)
Advanced	(20)	(10)	(20)

Total Score____of 50 possible.

Scoring:		
	750 to 829	Superior Services
	650 to 749	Advanced Services
	550 to 649	Low Advanced Services
	450 to 549	High Basic Services
	350 to 449	Basic Services
	250 to 349	Low Basic Services
	150 to 249	High Minimum Services
	50 to 149	Minimum Services
	Below 50	Below Minimum Services

Summary Sheet
Institutional Self-Evaluation

Two scores for each standard were obtained - one from the text of the standards and a second from the charts. List the scores in the appropriate place and total the score.

Text/Chart	Standard	Text Score	Chart Score	Total	Possible
1&A	General				71
2&B	Research & Evaluation				73
3&C	Developmental				95
4	Creative/Production				50
D	Visualization				55
E	Audio				30
F	Slide Tape				25
G	Sound Motion Pictures				30
H	Television				65
5	Distribution				65
I	Equipment Distribution				40
J	Electronic Distribution				45
6&K	Materials & Resources				93
7&L	Maintenance & Engineering				92
				Total Score	829

APPENDIX C

Management Process Model for The Learning Resources Program Profile

Background information
on the data collection instrument
for Task Force II - Post-Secondary Guidelines
of AECT-Association of Educational Communications
and Technology

Prepared by James Lied,
University of Cincinnati

I. INTRODUCTION

Undoubtedly, when you looked at the profile questionnaire for the first time you:

_____ 1. were ready to send it back
_____ 2. wanted to call A.E.C.T.
_____ 3. commenced screaming and kicking
_____ 4. 2 and 3 only
_____ 5. all of the above

Yes, a lot of information has been requested of you, but the benefits to you personally should make the investment of time worthwhile. It is the desire of the profile's designers to ask for only the most critical information; information which supports the following basic premises:

1. A.E.C.T. needs a data base.

As a professional group, we need to know what the base-line requirements are for a learning resource program in a particular post-secondary environment. How many books, films, etc. do similar programs have? How many projectors and other units of equipment? What number of square feet do similar programs have? How many staff should there be?

Furthermore, A.E.C.T. efforts to inform Federal officials on the value of Learning Resource Programs will be strengthened with a meaningful data base. Likewise, local, state, and regional governments and institutions will become more aware of the benefits incurred by investments in Learning Resource Programs.

2. Standardized Reports

Another reason for going to all this work is to standardize the internal reporting of a LRP. When the directorship of a program in changed or when the same director wants to compare critical statistics over the last five years, data will be more readily available. Furthermore, it will be in a form that will allow greater comparison with other Learning Resource Programs.

3. Financial Planning Information

If we sincerely believe that learning resources can provide many of the answers to questions facing our institutions, we must gather the kind of financial information on LRP programs that will convince the respective Boards of Directors and others responsible that investment in the LRP is the best course of action.

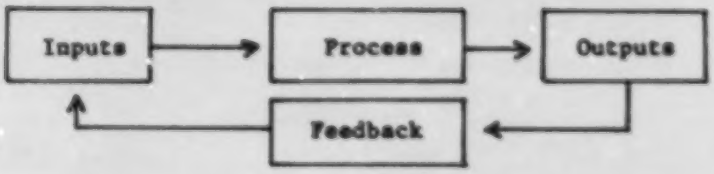
Of course, none of this can happen without our collective best efforts; not only in filling out the annual reporting form, but also in understanding the process through which these data become relevant information. Numbers (even your own numbers) will mean very little unless they are part of the strategic decision-making process.

Appendix A offers a glimpse of the management process used by the form's designers to keep questions relevant and tuned to the instrument's purpose. Please keep in mind that the profile questionnaire is part of a process to describe the things we do. It is not cast in stone, but merely a tool to assist us. It is a concerned attempt to record and describe the many dimensions of the LRP and to provide an initial source of information.

II. MANAGEMENT PROCESS MODEL

The Management Process Model (MPM) reflects the basic premise of the systems approach, but more specifically identifies critical points in the process that have an effect on management effectiveness. It is the measurement of managerial effectiveness that will indicate the degree of success or failure a particular Learning Resource Program has relative to its institutional home.

The systems approach suggests that for a quantity of inputs, the quantity of outputs should exceed inputs after going through some activity or process. The economists refer to this phenomenum as "added value". An example of "added value" is the combination of raw materials, labor, capital, buildings, and machines (inputs) which when organized through some process (or series of processes) produce cars or washing machines or lawn mowers etc. (outputs). In a Learning Resources Program the inputs could be thought of as materials (print, A-V, video, etc.), staff, building(s) (or space), equipment and supplies. Usually, the output is a series of services from the activities or process designed to provide the specified results. Still, tangible products may result from the process in the form of materials (LRP produced presentations) or equipment (LRP engineered and built devices). A diagram of the process would look as follows:

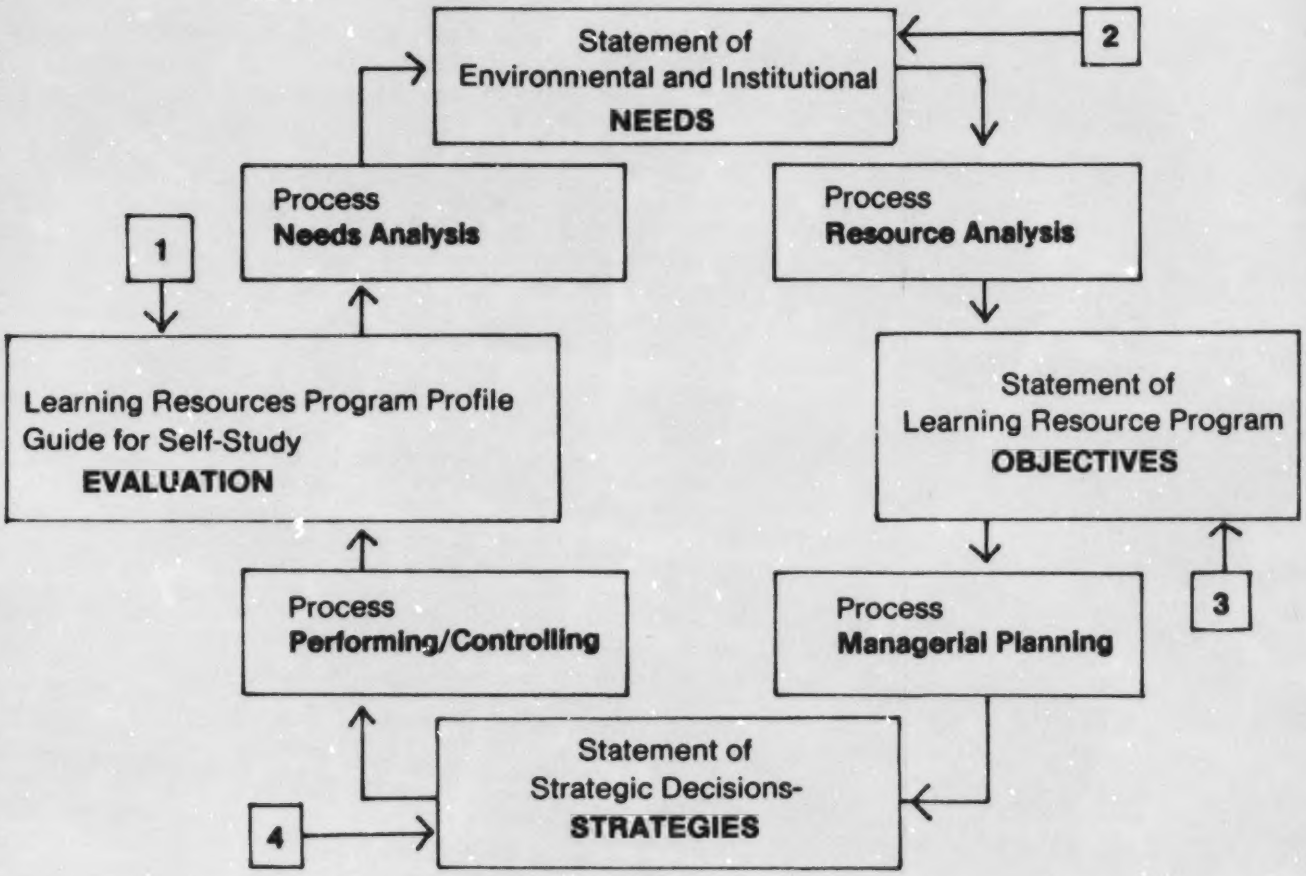


Feedback is the control mechanism that lets the manager know if indeed the outputs are as efficiently produced as possible given the inputs.

If strictly adhered to, the circular process in total can help create a most efficient enterprise, but efficiency is not really the goal of the MPM. With the MPM, effectiveness is the goal. Often times the two words are interchanged, but there is a significant difference in their meanings. Efficiency means to do things right; effectiveness means to do the right things.

For a Learning Resource Program, or any other internal service program, doing the right things--providing the needed services--is more important than great execution of the wrong things. Consequently, the MPM stresses the identification of the right things--reflected by the needs before creating a list of objectives. Furthermore, management strategic decisions must be based upon needs and objectives as well as past evaluations of performance.

The organization and sequence of the Management Process Model can be described as follows:



There seems to be no one "best" way to organize Learning Resource Programs in post-secondary institutions, but there are more than likely a range of alternatives. Some of the alternatives are better than others, depending on the conditions of support or lack of the same within the LRP's institution and its environment. Therefore, to maximize the effect of the MPM, the strongest place to enter the model is at 1., Evaluation.

By documenting LRP activities and resources, the Profile become an initial effort to document current activities and discover what alternatives are available. The weakest point to enter the MPM is at 4, Strategies. Here decisions have already been made, action has begun and commitment to tasks at hand are necessary. It's the point when you must first fight the fire without the luxury of all the facts about the nature of the fire and the structure. It's also not the time to be concerned with fire prevention even though that concern would be important if earlier discussions were possible.

On the other hand, if you have written objectives, enter at 3 which is better than 4. Furthermore, if entry is made at 2, one has to make assumptions as to what the institution needs. Consequently, the Profile can provide a most satisfactory starting point but truthfully any one of the other three points will provide access. The greatest dangers to the MPM are that with 3/4 of the activity spent in planning, action-oriented managers will concentrate 3/4 of their time on the implementation phase. Also, planning-oriented managers may tend to spend more time than necessary on planning and ignore the importance of the activity itself.

Beginning at point 1, the Learning Resources Program Profile, and perhaps if time permits, the Guide for Self Study, (also contained in the Standards) should be used to record a specific point in time. This can be used later to provide a standard upon which to measure future performance. From these documents, it is possible to begin an analysis of the institution's strengths and weaknesses as well as its place within the academic community. Further description of the Needs Analysis Process is found in part III.

The statement that is a result of this process need not be a 50 page document unless time and money are available. A simple statement, perhaps one that's even quite subjective, is a start that can be refined in the months and years to come. Obviously, the more accurate and reliable the data, the more probable the LRP will be successful in fulfilling institutional needs.

The Process of Resource Analysis deals with cost per defined task. The exercises can be quite lengthy too, but computers and simplified exercises should allow the manager and/or administrator of an LRP to realize true annual costs of the LRP. This appendix stresses money management from a cost viewpoint, but other cost analyses and financial analysis tools also can be appropriate exercises to identify the strengths and weaknesses of the LRP. Other analyses concerned with time could be used also i.e. time management analysis, forecasing, PERT, etc.

The creation of LRP objectives is a critical point in the model. In fact, statements of objectives must be congruent with the following premises:

1. Fit with institution goals and objectives.
2. Reflect the needs of the institution.
3. Be able to be completed within resources available.
4. Be measurable by quality or quantity.

A more complete discussion of creating objectives will not be possible within this appendix. Nevertheless, their importance is not minimized.

Objectives can be one of three distinct types: 1, routine or expected objectives; 2, problem-solving objectives; and 3, innovative objectives. The routine set of objectives are those tasks which are part of one's job description and are for the most part measurable. They may include expected reports, working hours, kinds of services, amounts of service offered, expected levels of income, etc. A measurable target should be included in the objective, but an acceptable range of quantities or an exceptional (too high and/or too low) level may be even more useful. Whatever the task, the chief LRP administrator and the supervisor should both compose and agree to these written statements.

The problem-solving objectives are usually more difficult to describe possibly because the problem can never be entirely resolved or because more information is required to define the problem. For instance, equipment distribution complaints can rarely if ever be reduced to zero, but an unusually high rate can be reduced. Nevertheless, one individual should assume responsibility for resolving the problem. A committee would usually be ineffective except for gaining information. Likewise, measurable statements of objectives are usually more effective even if it is nothing more than a realistic estimate of the time when problem resolution is expected.

Innovative objectives are usually most difficult to quantify. However, their effect on resolving institutional needs and maximizing Learning Resource Program resources may be paramount. These objectives, usually more narrative with less quantifiable data, will probably define a project. Still, effective management requires time expectations and planned activity.

The objectives offer a focus for the effective utilization of resources to meet the critical needs and goals of the institution. The managerial plan must then make it happen. It must realistically allow for future contingencies including disaster, financial crisis, inavailability of supplies, sickness, etc. The plan must also reflect priority of institutional needs and a concern for maximizing available resources. This process provides a statement of strategic decisions. Risks, value judgments, and competition of service components will need to be recognized before a decision is made. How the decision is made--whether autocratically or democratically--will affect the strategic plan and place the LRP in a favorable position.

In the performing, controlling process, evidence of a sound managerial plan will be felt by clients wishing to use LRP services. All efforts up to this point are usually quite invisible to the student, faculty member, administrative staff member or community patron, but when the spotlight goes on for regular daily performance, all the rehearsing and hard work in planning should begin to make a real contribution.

Integrated within the performance of duties and responsibilities, is the function of control. Without strategic control points in the

day to day events, there would be no hope of measuring performance and improving the effectiveness of the LRP. This does not mean collecting numbers for the sake of collecting numbers, but in identifying critical measurements and providing as efficient a way to sample that measurement without disrupting service to clients.

The controlling process also implies security--protecting and caring for the LRP resources. When the security function is brought into focus as part of on-going affairs of the LRP, managers and administrators should be more aware of the consequences of too much or too little protection.

During the performing/controlling process there should be a focus on critical data. As activity occurs, what measures of successful performance are relevant to meeting current and long range objectives? What data can be collected to indicate the best use of resources? What indicators are important to review daily, weekly, monthly and/or annually that measure successful resolution of institutional need?

The answers to these questions and others bring us full circle to evaluation. The Learning Resources Program Profile will provide some initial accounting of ongoing activity, but further information will be required for effective managerial planning. As the Profile improves during the years to come, continued improvement identifying critical data will unfold, but it is doubtful that any future Profile will satisfy all of the needs of LRP administrators.

Still, the Profile is a start, the MPM is a start; a beginning to identify where we are, where ve want to go, and how we might get there.

III. NEEDS ANALYSIS

The process of analyzing the learning resource needs of any institution begin with a clear picture of what the current historical conditions are for the institution itself. History has much to do with the valuation of relatively new concepts such as instructional resources and the systematic design of instruction. Furthermore, the current financial health of the institution and the nature of the demand for instructional, research and community services will certainly affect the learning resource program.

A. Environmental Factors

When identifying the institution's need for a Learning Resource Program, it is recommended that the institution's environment be identified first. The demands placed upon the institution, will to a great extent, determine what is needed from that institution's Learning Resource Program. Global, national and local conditions all affect the institution's ability to serve with the most direct influence at the local level.

The number and size of nearby institutions, their programs, their commitments to resources, and the dimensions of the cooperative and competitive programs affect the policies and priorities of the institution. The price of tuition among neighboring institutions as well as the image of the institution are important local factors.

National rank, prestige and image may also be extremely important data as well as current national and regional trends in population. Demographically the learner is changing. What effects both short range and long range, will this mean for Learning Resource Programs?

The international concerns of peace, war, economics, populations, etc., are perhaps more remote to daily concerns, but long range can cause major changes in institutions. Another effect is one of pending crisis. However, some institutions are global in nature and for those institutions subtle changes in one country's approach will affect that institution's needs.

The following questions should be helpful in identifying useful information on the institution's environment.

1. What are strengths and weaknesses in the demand for the academic programs of instruction?

2. Is this institution thought to be the best, worst, largest, smallest or most important for any particular program or facility?

3. What single word do people use to describe this institution? (Local, national, international)

4. What is the general financial condition of the institution's geographical location(s)?

5. What is the general financial condition of this institution? Are all possible sources of income being used?

6. What kind of people are attracted to study (not necessarily accepted and registered students) at this institution?

7. Is there a potentially greater number of students in the institution's area(s) of influence?

8. What services do persons in the institution's area of influence expect the institution to provide?

9. Do services at the institution compare favorably with other institutions attempting to attract the same potential student, faculty member or staff?

10. What are the limitations for willing persons to gain access to the institution's programs? viz., transportation, entrance qualifications, time, money, etc.

11. How supportive are local, national, and international communication channels to the institution's programs? viz., newspapers, television, radio, magazines, etc.

B. Institutional Factors

From the first day one is employed within an institution, nearly everyone has a "feeling" about the nature of the institution in which one works. Articulating and objectively determining dimensions of the organization as well as determining the needs of the institution are difficult tasks. And yet, it is the assumptions made in determining the priority of needs of the institution that determine to a great extent how effective a Learning Resource Program will be.

If you must start with the barest of sketches of the institution, use that. If you can ask a small number of customers or issue a small survey, do that. However, start. Don't spend six months researching instructional resource requirements unless the program is somewhat mature. It is more likely that there will be more effective performance of managers and supervisors who are frequently asking faculty, students and staff the following basic questions:

1. What is your overall reaction to our (LRP or other) service(s)?

2. What are the strengths?

3. What are the weaknesses?

Written responses are particularly important in order to identify the issues that more frequently occur. Numerical ratings (5 = highest; 1 = lowest) can be incorporated to generate a quantifiable ranking of both positive and negative issues. The three questions are also brief enough that qualitative remarks can reinforce or redirect thinking of current services offered.

However, more complete data is usually required to successfully position the services of a Learning Resource Program within the institution. At first this may not be possible. But ongoing programs should be aware of the information and accordingly establish, eliminate or change services.

An information checklist should include:

1. Number of potential users, by department or area.
2. Number of current users, by department or area.
3. Characteristics of current users.
4. Characteristics of potential users.
5. How does a user decide to use Learning Resource Program services?
6. When does a user decide to use Learning Resource Program services?
7. What obstacles prevent users from using services?
8. What is the value of work provided?
9. What is the frequency of user using services?
10. Why use this particular Learning Resource Program service?
11. Who influences the decision to use this service?
12. What unfavorable attitudes exist?
13. Are there indications of changes in user habits?
14. Why do users and potential users need this service?
15. Are there competing Learning Resource Program services offered within this institution? Outside this institution?
16. What share of the institution's total need for service is fulfilled by this Learning Resource Program?
17. How does this Learning Resource Program differ from other competing Learning Resource Programs?

The specific task is to develop a useful statement of institutional need. Therefore, other questions may be asked and some of these questions may be deleted, or both, depending on the unique circumstances of the Learning Resource Program. Futhermore, not every possible dimension of need can be listed, but periodic, perhaps annual, use of this type of list will begin to focus the Learning Resource Program on institutional needs.

C. Statement of Need

The following example may be helpful in determining your own statement. Please note that with such a description a trained professional could more easily prescribe the limits of what the Learning Resources Program can do or not do.

> Ridgecrest College is a small, traditional liberal arts college that three years ago identified a need in the community for business courses. In addition, as many as 60 percent of the liberal art students were also interested in taking business courses although most were not interested in being business majors.
>
> The Learning Resources Center has been able to maintain a good collection of materials for the traditional programs. Even with recent inflationary pressure, faculty and students consistently rate services high. Community people can and do regularly use materials on-site, but cannot take films, books and other materials from the center.
>
> With the new business program, the Academic Provost has asked for an additional $250,000 over the next three years to provide a similar level of support to the business program as that currently provided to the liberal arts faculty. However, there is some evidence that even though the number of class hours and students will double, the needs of the faculty and students will be different. Most faculty will be part-time and not require a great deal of additional research materials. On the other hand, they will require more classroom equipment, especially 1/2" portable video units (for interviews, student presentations, etc.), and films and other media materials.
>
> The student taking a business course will be more likely to make greater use of individualized-learning materials. In fact, since many will be from the community, they will have limited time on campus. Borrowing of materials may be a problem and indicators on the circulation of materials will need to be watched carefully.
>
> Both faculty and students will be more dependent on staff assistance. Training LRP staff for these new clients is a must. Several additional staff members may be required.
>
> The present building has adequate study space, but mediated learning space will need to be built. Food service will need to be increased. Parking around the LRC will be a

major problem during peak hours, 1:00 p.m. to 5:00 p.m.

Demand for some programs in the liberal arts has decreased gradually during the last ten years. The president has a proposal to bring to the next Board of Directors' meeting that many suspect calls for the transfer of the chemistry and physics programs to Springcliff College, twenty five miles away. If that happens, one sixth of the current book and serial collection, one-third of the media collection and a small black and white television studio will no longer be part of the LRC. Springcliff College, in turn will give its holdings in literature and history to Ridge Crest.

Dollars received as a result of the transfer of these assets will be used to retire several construction bonds issued in 1964. Further revenue is anticipated from the sale of real estate left to the College by an alumnus. Otherwise, the College has a sound financial plan and demand for its programs seems strong.

IV. RESOURCE ANALYSIS

Any manager or administrator is usually expected to know what people, places and things as well as funds are available to properly manage any enterprise. This is likewise expected of Learning Resource Program administrators, but the analytical tools available for the LRP administrator are rather basic and usually insufficient for the kinds of decisions that person is required to make.

Decisions are critical parts of the management process. Still, sound analysis of current conditions and available resources provide a foundation of support in the decision-making process. Risk is, of course, not eliminated, but expectations and contingencies can be identified.

Analysis is a tool to discover the dimensions of resources available. It is a foundation on which to set both strategic objectives for the programs as well as operational objectives as discussed in part II. The broadest types of analysis could be described as either qualitative or quantitative. However, these general descriptors may be too general to aid the LRP administrator. Consequently, the following categories of analysis should be more useful in determining the nature of an LRP:

1. One-dimensional measurements -

   In essence these are simple counting exercises; the number of films in a collection, the number of uses of overhead projectors annually, the number of full-time staff, etc. The Profile is mostly recording information of this type.

2. Multi-dimensional measurements

   These analyses are extensions of the one-dimensional measurements. In this type of analysis relationships and patterns can be discerned. The Services Offered/Resources Available Matrix in the Profile is an example of this method.

3. Percentage

   Under this type of analysis would fall those measurements that ask what percentage of total possible faculty who could use your service use your service, or what percent of available studio time is used for video recording. These are questions relating to capacity, a share of market or parts of someone's available time. At several points the Profile begins to ask this kind of question.

4. Financial or dollar-based

   The dollar seems to be a useful common denominator for analysis. Perhaps in part due to its traded value in the general national and international market place, this type of analysis can be more easily compared among institutions. Still, there are gigantic pitfalls to comparison. In fact, comparing one LRP with another without also comparing the institutions in which each is located would be disaster.

Nevertheless, standard financial ratios can be developed for LRP's that can give relative indications of an LRP's ability to perform. The financial page of the Profile should provide the basic information needed to create meaningful indicators and ratios.

Cost analysis, on the other hand, is not nearly as available to LRP administrators. It is time consuming work and the technical aspects of proper cost accounting have been relatively infrequent in the literature on LRP's. Cost studies and the probable cost study techniques are for the most part missing. The Profile has a section dealing with Current Value that will indeed be left blank until the majority of LRP administrators visualize that such an exercise will have tremendous value.

Part of the Profile designers' attempt is to gather more meaningful financial information. It will require some instructional program of its own, but this dimension of the financial support of an LRP is critical for continued growth of Learning Resource Programs.

5. Strengths vs. Weaknesses

This type of analysis is usually more qualitative and consequently is absent from the Profile. However, information recorded can be used to analyze relative strengths and weaknesses in various areas. Furthermore, the Guide for Self-Study could very effectively be used to analyze and organize this type of information.

V. MANAGERIAL PLANNING

As institutional needs are discovered, resources are analyzed, and operational objectives are established, a managerial plan begins to emerge. The plan is designed to provide everyone employed in the Learning Resources Program with guidelines and priorities as to how their particular work should be done. Committed to a series of operational objectives, supervisors and personnel will increase their collective potential and provide more effective services to the institution.

The plan should be a roadmap, a guidebook that points the way. It is not a rigid rule book or book of law on bureaucratic obstacles. Plans should be flexible and allow for future contingencies. Some contingencies can be planned for; others cannot, but the attempt should be made to be prepared for nearly any situation.

To maximize planning, the process of planning should be open. Managers and supervisors especially will be more enthusiastic and committed to objectives if they have been part of the process of delineating the managerial plan.

Plans can have various completion times too. A plan to complete a project within 12 months is more likely to be finished than one requiring 4 to 5 years. However, five and perhaps ten year plans can be helpful in setting the horizon and the "big picture". These long range plans stretch one's perspective and focus performance as having a more distant impact.

Consequently, at least an annual review and an evaluation of plans are important. Annually, plans should be reviewed in light of any changes in institutional need and resources available. Objective should be reviewed annually. Changes in any part of the process will presumably change every other component by some degree. Constant adjustment is most costly, but annual reviews of the entire process will develop resources and make the Learning Resources Program more effective.

VI. PERFORMING, CONTROLLING

Up to this point in the process the concentration is on analyzing, organizing and planning. But, at this point, the manager must perform. It is time to stop thinking about what has to be done. It is time to do it.

However, activity requires sampling to see if the tasks are operating as planned. Are there sufficient funds? Are clients using services at predicted levels? Is there a service that is not being performed at specified levels? Part of the administrator's task is to check key indicators of performance and determine whether these quantities are within an acceptable range determined by objectives.

Established, routine tasks may not change a great deal and are therefore, quite predictable. Projects, on the other hand, are not routine. Indicators such as the budget and time schedule can often provide acceptable control. Each task is to determine what they are and make them part of the task objectives.

Often these indicators will be stated as a range of probabilities. For instance, this project will cost between $1200 and $1800, be completed in 6 to 8 months and will require 150 to 200 hours of production time. Or, another might be to select and purchase materials that are designed to assist with the study of South American Rodents. Cost should not exceed $2500, yet satisfy 95% of the inquiries for graduates researching this topic. Without built-in indicators the controlling function is limited to issues of security and protecting assets.

Indicators that are monitored should be part of objectives. However, information requested as part of the AECT annual report may or may not be the same as indicators your particular Learning Resource Program is observing. Eventually, the required information for a national report should also be fundamental for internal control. It is possible that this proposed report has come close to providing needed information but it may fall short of identifying the unique indicators necessary to manage each and every Learning Resource Center.

Some approaches used in the process model can be traced back in history to the 1400's. Although modified to reflect the concept of a Learning Resource Program, the cost analysis and other procedures have been tested repeatedly in many organizations. Some readers may be unfamiliar with techniques and the language, but a sincere attempt has been made to tailor a process to the management of the Learning Resources Program. Still, the process is subject to change, too. Otherwise, neither the process nor the Learning Resources Program become more effective.

APPENDIX D

Guide for Self Study of Learning Resources Programs in Higher Education

Purposes:

1. What are the objectives of the Learning Resources Program?
2. How do they support the institution's objectives?
3. How were these objectives determined?
   - 3.1 Who overtly, covertly, sets policy?
   - 3.2 How, by whom, and how frequently, are needs assessed?
   - 3.3 Describe any advisory bodies

Services:

1. What services are required to meet the objectives of the Learning Resources Program?

Examples include:

Instructional Development consultation and assistance	Audio recording and duplication
Equipment acquisition and distribution	Equipment and materials maintenance
Materials acquisition and distribution	Reference
Instructional television services	Computer assisted instruction
Graphic illustration and production	Supervised student production facilities
Photography	Instruction
Special services	

- 1.1 Describe the objective each service is required to support.
- 1.2 What evidence supports the requirement for each service?

2. How and to what extent is each service you list in the above section provided now?

2.1 DOoes the Learning Resources Program maintain a centralized service? If so, does it have a monopoly on campus? If not, what other services are there on campus, what is the extent of their jurisdiction, and to whom do they report? What is the rationale for this?
2.2 What factors (a) encourage or (b) discourage the offering of these services? Who initiates requests for these services? Who determines which services are offered?
2.3 Describe methods used to evaluate the quality of, and responses to, services.
2.4 To whom are services refused, and under what circumstances?
2.5 What changes have been made in the past five years?
2.6 What changes in service offerings are necessary (a) now, and (b) in five years, to fulfill the objectives of the Learning Resources Program?

STAFFING:
1. What are the strengths and weaknesses of staff's ability to provide the services described above?
2. How are the services coordinated?
3. Describe the changes you recommend to improve level and utilization of staff.
4. How well do the experience and training of the staff relate to the services they are expected to provide? Does each service unit supervisor meet AECT certification standards?
5. Are staff members adequately recognized and compensated for the work they perform?
6. Describe the process whereby staff members are evaluated.

ADMINISTRATION
1. Evaluate the organizational plan for administering the Learning Resources Program.
1.1 To whom does the program administrator report? Is this the most appropriate to facilitating accomplishment of the program's objectives? If not, what change would you recommend, and why?
1.2 Confirm whether the organization is structured to most effectively accomplish the objectives of the Learning Resources Program. What changes do you recommend in the organizational structure?

2. Report on the individual responsible for administering the Learning Resources Program, with respect to training and experience, length of service, and results of evaluation of performance.

2.1 How do the administrator's training and experience relate to the program's objectives?
2.2 Is the administrator's compensation comensurate with that of similar positions of responsibility?
2.3 Who evaluates the administrator's performance, and by what criteria?
2.4 How do these performance criteria relate to the program's objectives?

3. Are Learning Resources Program personnel given academic status?
3.1 If so, describe/explain the procedure whereby academic status is achieved.
3.2 If not, what status is accorded?
3.3 What determines that a position should have academic status (e.g., teaching, publishing)?

4. Describe Learning Resources Program personnel's involvement in research.
4.1 Do they design and execute original research in design, production, utilization, or evaluation of learning resources and methodologies?
4.2 How is research applied in support of program objectives?

PHYSICAL FACILITIES, EQUIPMENT, AND MATERIALS:

1. Evaluate the physical facilities available to serve the Learning Resources Program.
1.1 Describe all specialized instructional media facilities. Indicate how each supports the institution's objectives.
1.2 What are the Learning Resources Program's strengths and weaknesses in facilities?
2. Report all Learning Resources Program equipment available to support the institution's goals. Note locations, and ages of the equipment.
2.1 Describe the program for systematic replacement of equipment.
2.2 Indicate holdings not controlled by the Learning Resources Program.
2.3 What are the program's strengths and weaknesses in equipment holdings?

3. Report all media materials holdings, and indicate how these support the institution's objectives.
3.1 Describe the program for systematic replacement of materials.
3.2 Indicate holdings not controlled by the Learning Resources Program.
3.3 What are the program's strengths and weaknesses in materials holdings?

4. What information is kept concerning the utilization of instructional media facilities, Learning Resources Program equipment, and materials?

5. What is the percentage of service requests that are refused because of insufficient equipment or materials?

6. Describe routine methods used to evaluate quality of and responses to materials and equipment.

7. What special efforts are being made to assure effective utilization of instructional media facilities, materials, and equipment?

8. Describe the Learning Resources Program's involvement in planning, purchasing, controlling, and maintaining materials, facilities, and equipment.

FINANCING

1. Describe the process by which the Learning Resources Program budget is prepared, approved, funded, and administered.
    1.1 Indicate proportion of program budget supported by recurring institutional allocations.
    1.2 Indicate proportion of program regularly supported by funds generated through user charges, external income, or other non-recurring income sources.
    1.3 Indicate strengths, weaknesses, and recommendations for improving the budget/funding process.

2. Describe the adequacy and stability of funding for the Learning Resources Program in support of identified needs.
    2.1 Indicate specific adequacies and inadequacies of funding in Capital, Operations, and Staffing.
    2.2 Describe trends in funding which would affect program stability.
    2.3 Make recommendations for changes in Learning Resources Program funding.

APPENDIX E

InterUniversity Council of
Media Directors
State of Ohio

Guidelines

DEPRECIATION OF EQUIPMENT

(using straight-line method)

January, 1977

Prepared for adoption by
James R. Lied, Assistant Director for
Instructional Services, University of Cincinnati,
Cincinnati, Ohio.

Adopted at the IUCMD meeting, November 17,
1976 as a position paper.

Equipment and library materials (books, films, etc.) are purchased with the belief that they will function more than one year. Supplies such as stationery, paper clips, and pencils are purchased with the belief that they will provide service for only one year or less.

In assessing the real cost of equipment it is important to consider the estimated years of life for a particular type of machine. Each unit of equipment will use a specific percentage of the unit's total cost per year. For example, a particular 16mm projector costs $800 and is expected to have a useful life of five years. Using the "straight-line" or "constant rate" method, the projector would "cost" $160 per year for five years.

By using only annual budgets, it is easy to loose sight of costs that will occur outside of that budget. Furthermore, without recording these costs, it is difficult to assess the true value of the equipment available and the point where a unit of equipment should be removed from active service. Consequently, to keep a pool of equipment at a given level, new equipment must be purchased each year to match the combined annual depreciated cost of all equipment in service during the year.

Determining the Useful Life of Equipment

No one schedule of expected years of use for a variety of equipment types will suffice for every institution, but each institution should be responsible for determining what is the useful life of its particular equipment. The following considerations should help determine that schedule:

1) What is the number of hours of use a particular type of equipment will be operated annually?
2) What is the frequency with which a particular type of equipment is moved?
3) Will this type of equipment be used by a few people or many different people?
4) How fragile is a particular equipment type? Is it heavy duty? Is it designed for occasional use?
5) Are faculty using a particular type of equipment more each year? less? about the same?
6) At what condition is a particular type of equipment unsatisfactory for use in the service? - a probability of failure of 10%? 25%? 50%?

The amount of use is the most critical factor that determines the expected years of life for a given equipment type. The more an equipment type is used annually, the fewer years it will be usable.

Some types of equipment are designed to be portable but at some institutions they are fixed in specific locations, i.e., overheads permanently fixed in many classrooms, screens mounted above chalkboards. The more an equipment type is moved, the fewer years it will be usable. Furthermore, the extent to which an equipment type is moved (i.e., hall corridors or outdoors over rough pavement) also should be considered. The more gentle the transfer the greater the number of years a particular equipment type will be usable.

The people who will be operating this type of equipment, their number, their training and their experience will also affect the number of useful years expected from a particular equipment type. The greater the number of unskilled operators, the fewer the years of useful life that can be anticipated.

A particular type of equipment has its own system design characteristics as well. Some types of equipment are built like long distance commercial tractor-trailers, rugged, dependable, with a wide tolerance for acceptable operation. Others are delicate, sensitive electro-mechanical systems that have a critical tolerance for acceptable operation. Some systems are simple, others are extremely intricate and complex. The simplier and more rugged a particular system is the greater the number of useful years of service that can be expected.

The trends of use will affect the number of years too. If users are going to be using a particular type of equipment more in the future, the expected useful life of that equipment type will be less.

The most difficult thing to assess is when a particular type of equipment is no longer usable. Each institution will find someone who can point to an overhead projector purchased in 1952 and say "What do you mean usable life, it still works doesn't it?" Yes, it may work when you go to use it, but what is the probability that it won't? What will customers tolerate when they schedule a unit of equipment for a class or seminar? Will they be willing to tolerate a 50-50 probability? or are they expecting something closer to perfect - 100%?

The guidelines are flexible and will allow either of these alternatives to be possible as well as any decision on the other consideration, but really any are valid as long as it reflects the situation at a particular institution.

During 1975-76 academic year, Howard Cotrell, Assistant Director, Instructional Media Center, Bowling Green State University, collected schedules of expected years of use from several sources and surveyed the members of IUCMD independently for their perceptions. What follows are charts which describe these schedules. Depending on one's need for accuracy, one could develop a schedule unique to the institution, use part or all of these schedules which were developed for specific purposes or use the IUCMD schedule which is a combination of the opinions of media centers of state universities in the State of Ohio.

Life Expectancy in years

Equipment Type	B.A.V.I.
Movie Projector, 16mm	6
Overhead Projector	10
Tape Recorder, R-R	5
Television Receiver	5
Radio	5
Public Address System	7
Microphone	5

B.A.V.I. = Bureau of Audio Visual Instruction
New York Public Schools

EPIE SURVEY ON LIFETIMES OF AV EQUIPMENT

CATEGORIES OF AV EQUIPMENT	Number Surveyed	Weighted Average Hours Used Per Year	Weighted Average Life In Years	Average Life In Hours
Fixed Audio Cassette Tape Recorders	1,662	540	9.6	5,203
Filmstrip Projectors	5,429	443	11.1	4,896
Cassette Sound Filmstrip Viewers	711	625	7.7	4,816
16mm Sound Movie Projectors	4,536	488	9.7	4,742
Reel-to-Reel Video Tape Recorders	632	690	6.8	4,689
Portable Audio Cassette Tape Recorders	10,430	765	6.1	4,665
TV Receivers and Monitors	3,051	538	8.6	4,624
Cassette Video Tape Recorders	126	516	6.9	3,573
Phonographs	10,910	351	9.1	3,188
Slide Projectors	2,872	412	7.7	3,176
Filmstrip Viewers	4,426	382	8.1	3,099
Disc Record Sound Filmstrip Projectors	284	318	9.6	3,051
TV Cameras	552	382	7.3	2,784
Cassette Sound-Slide Projectors	207	388	6.2	2,396
Headphones	21,027	446	5.0	2,224
Super 8mm Sound Movie Viewers	24	185	10.8	1,992
Audio Card Readers	707	212	7.8	1,653
8mm Silent Movie Projectors	627	195	7.9	1,546
Super 8mm Sound Movie Projectors	167	227	6.3	1,431
Cassette Sound Filmstrip Projectors	533	243	5.4	1,312

Forty responses in the above survey are from college-level users and 102 are from elementary or secondary schools. A number of items not on the list, such as overhead projectors, opaque projectors, and movie screens will be covered in another survey this year. The survey was conducted by a questionnaire included in the December 1, 1974 EPIEgram, a newsletter for schools.

Life Expectancy of Equipment in Years

Equipment Type	T.A.L. (Teaching Aids Lab. - The Ohio State Univ.)
16mm sound proj.	7
16mm silent proj.	7
8mm sound proj.	5
8mm silent proj.	4
Automatic slide proj.	6
Manual slide proj.	8
Overhead proj.	8
Opaque proj.	8
Audio tape recorder	5
Record player	5
Portable sound system	10
Video tape recorder	5
Video camera	5
Video monitor	6
Projection screen	5
Projection cart	10
Slide tape programmer	5
Response system	5
Amplifier	10

IUCMD, State of Ohio Estimated years of life for Audio-Visual Equipment

Equipment Type	Longevity (Years) Mean	Median
Motion Picture Projector, 16mm, Sound	7.5	7.5
Motion Picture Projector, 16mm, Silent	6.5	7.5
Motion Picture Projector, 8mm, Sound	5.1	5.0
Motion Picture Projector, 8mm, Silent	4.8	4.5
Slide, Projector, Automatic	6.3	5.5
Slide Projector, Manual	9.0	10.0
Filmstrip Projector	7.6	7.5
Filmstrip-Slide Projector	8.8	9.5
Overhead Projector	7.6	8.0
Opaque Projector	8.0	8.0
Tape Recorder, Audio, Open Reel	6.5	6.5
Tape Recorder, Audio, Cassette	5.0	4.5
Record Player	6.3	5.5
Lantern Slide Projector	9.2	10.0
Portable Sound System	5.6	5.0
Video Tape Recorder, Open Reel	4.7	4.5
Video Tape Recorder, Cassette	4.7	5.0
Video Camera	6.0	6.0
Video Monitor	7.0	8.0
Video Receiver	5.3	5.5
Projection Screen, Wall	6.8	6.5
Projection Screen, Tripod	4.0	4.0
Projection Screen, Auditoria	10.0	10.0
Projection Cart	7.3	9.0
Slide-Tape Syncroniser	5.3	5.0
Slide-Dissolve Unit	6.4	5.0
Student Response System	10.0	10.0
Microphone	3.8	3.0

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#	Equipment Type	1. Purchase Date mo. yr	2. Fund Source I & G	3. Fund Source Title VI	4. Total Costs	5. Salvage Value	6. Total Cost Subs. Value	7. Estimated Life	8. Value Cost/Yr	9. Years since purchase	10. Accum Value Costed	11. Net Value	12. Status	13. Annual Depreciated Cost
111	900AV Car.	7 1967	50%	50%	189.50	25.00	144.50	6	24.08	9	144.50	25.00	TC	0
112	900AV Car.	7 1967	50%	50%	189.50	25.00	144.50	6	24.08	9	144.50	---	Stolen	0
113	900AV Car.	7 1967	50%	50%	169.50	25.00	144.50	6	24.08	9	144.50	25.00	McM	0
114	900AV Car.	7 1969	50%	50%	159.40	25.00	134.40	6	22.40	7	134.40	25.00	TC	0
117	AF-2 Car.	7 1971	50%	50%	205.20	25.00	180.20	6	30.03	5	150.15	55.05	410	30.03
118	AF-2 Car.	7 1971	50%	50%	205.20	25.00	180.20	6	30.03	5	150.15	55.05	410	30.03
119	AF-2 Car.	7 1971	50%	50%	205.20	25.00	180.20	6	30.03	5	150.15	55.05	410	30.03
120	AF-2 Car.	7 1971	50%	50%	205.20	25.00	180.20	6	30.03	5	150.15	55.05	410	30.03
121	AF-2 Car.	7 1971	50%	50%	205.20	25.00	180.20	6	30.03	5	150.15	55.05	410	30.03
122	AF-2 Car.	7 1971	50%	50%	205.20	25.00	180.20	6	30.03	5	150.15	55.05	410	30.03
140	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	---	Stolen	0
141	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	---	Stolen	103.00
142	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	Biology	26.00
143	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	Biology	26.00
144	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	410	26.00
145	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	410	26.00
146	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00		Stolen	0
147	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	410	26.00
148	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	Physics	26.00
149	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	German	26.00
150	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	TC	26.00
151	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	Schmid	26.00
152	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	CC	26.00
153	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	410	26.00
154	EKTA B-2	7 1973	50%	50%	181.00	25.00	156.00	6	26.00	3	78.00	103.00	Civ. Eng.	26.00
												1641.30		595.18

Work Sheet

The Work Sheet is described in detail to assist in the establishment of a depreciation system. Data are calculated to the last day of a fiscal year.

Each unit of equipment should be classified by type of equipment and identified with a line of the work sheet as the above example sheet shows. Column one should contain the month and year the particular unit was purchased. Columns two and three are optional but can be helpful to show the portion of contribution made by the institution. Column four is the total cost of the unit including accessories and carrying case if appropriate. In columns five and six a salvage value is declared and suutracted from column four. In columns seven and eight the figure in column six is divided by the years of expected useful life and given in column eight as the depreciated cost per year. Columns nine and ten show how old the equipment is and what amount has been costed to this date. The 11th column is the current net value of the unit of equipment - column four minus column ten.

The 12th column is to show the current status of that unit of equipment. This column could show where a unit was stored or when it was lost or stolen. In the last column, the annual depreciated cost is determined by first comparing column seven with column nine. If the number in column nine is larger, the amount posted in column 12 is zero. If column seven is larger the value in column eight is then recorded also in column 13 unless the unit has been lost or stolen in the same year. In that instance, the annual depreciated cost would equal the original total cost minus the accumulated depreciation.

Determining Salvage Value

Some institutions will prefer to depreciate the cost of a particular unit of equipment to zero over a specified number of years. For other institutions a value can be placed upon a unit at the end of its useful years of service to reflect a salvage value. This value may reflect the cost of parts still in the machine which are usable in other operating machines. It may be the value at which a particular unit could be sold to a private individual or organization not associated with the institution. (Sales to institutional components might cause repair problems at a later date.)

Determining the Value of Equipment

By adding the values in column 11 for all categories of equipment, it is possible to obtain a realistic value for equipment operating within the service. Obviously subtotals could be calculated to show the value of equipment by equipment group or location or even by program area.

Determining the Annual Cost of Equipment

By adding the values in column 13 for all categories of equipment, it is possible to obtain a value that reflects the real costs of equipment for a given year. If this figure is lower than an annual budget figure for equipment expenditure, it suggests that support for equipment is declining. When equal there is a state of equilibrium, if inflation is zero and demand for services is constant. If the annual budget amount is greater, there is increasing support unless inflation and accelerating demand destroy the effect.

APPENDIX F

Constituent members of the
Council on Joint Secondary Accreditation

1. Association of Independent Colleges and Schools
2. Middle States Association of Colleges and Schools
3. National Association of Trade and Technical Schools
4. New England Association of Schools and Colleges
5. Northwest Association of Schools and Colleges
6. Southern Association of Schools and Colleges
7. Accrediting Association for Community and Junior Colleges
8. Western Association of Schools and Colleges
9. National Architectural Accreditation Board
   Architecture--First professional program
10. National Association of Schools of Art
    Art--institutions offering professional preparation
11. American Association of Collegiate Schools of Business
    Business-Bachelors' and Masters' degree programs
12. American Chemical Society
    Chemistry--undergraduate professional programs
13. Council on Chiropractic Education
    Chiropractic education--Schools and programs leading to a Chiropractic degree
14. Association for Clinical Pastoral Education
    Clinical Pastoral education--professional training centers
15. American Dental Association
    Dentistry and dental auxiliary programs
16. Engineers Council for Professional Development
    Engineering
17. Society of American Foresters
    Forestry--professional schools
18. National Association for Industrial Technology
    Industrial Technology--Baccalaureate programs
19. American Council on Education for Journalism
    Journalism--first professional degree programs
20. American Bar Association
    Law--professional schools
21. American Library Association
22. Association of College and Research Libraries
    Librarianship--master's degrees
23. Accrediting Bureau of Medical Laboratory Schools
    Medical laboratory technology--professional programs of varying lengths
24. Council on Medical Education, American Medical Association
    Medicine--Programs leading to MD degrees in basic medical sciences

25. National Association of Schools of Music
    Music-Baccalaureate and graduate degree programs
26. National League for Nursing
    Nursing education--bachelors' and masters' degree programs
27. American Optometric Association
    Optometry--professional schools
28. American Podiatry Association
    Podiatry--professional schools
29. American Psychological Association
    Psychology--doctoral programs
30. Council on Rehabilitation Education
    Rehabilitation counseling--masters' degree programs
31. American Speech and Hearing Association
    Speech pathology and audiology--masters' degree programs
32. National Council for Accreditation of Teacher Education
    Teacher education--bachelors' and higher degree programs
33. American Association of Colleges for Teacher Education
    Teacher education--bachelors' and higher degree programs
34. American Veterinary Medical Association
    Veterinary medicine--schools offering DVM or VMD programs

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THE FOLLOWING PAGES ARE INCLUDED FOR YOUR CONVENIENCE SHOULD YOU CARE TO MAKE TRANSPARENCIES FOR USE WITH GROUPS ON CAMPUS.

CHART 1 STANDARD 6.1.1

Instructional Development Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	MAY BE ASSUMED BY DIR. OF LRC OR DESIGNEE; 1/2 TIME MINIMUM PREFERRED. M.A. PREPARED DEVELOPMENT ASSISTANT.	NONE REQUIRED.	NONE REQUIRED.
BASIC	ASSISTANT DIRECTOR FOR DEVELOPMENT; DOCTORAL EMPHASIS IN INSTRUCTIONAL DEVELOPMENT. CLERICAL ASSISTANT.	PRIVATE OFFICE WITH ADJOINING CONFERENCE AND WORK SPACE.	ADDITIONAL OFFICE EQUIPMENT; ACCESS TO COMPUTER AND PRODUCTION EQUIPMENT.
ADVANCED	1 ADDITIONAL DEVELOPER PER 100 FACULTY. 1 CLERICAL ASSISTANT PER 3 DEVELOPERS. 1 GRADUATE ASSISTANT PER DEVELOPER.	1 OFFICE SPACE PER INDIVIDUAL; PLUS 1 PER 50 FACULTY MEMBERS.	ADDITIONAL OFFICE EQUIPMENT AS NEEDED.

CHART 2 STANDARD 6.1.2

Faculty Development Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	MAY BE ASSUMED BY DIR. OF LRC OR DESIGNEE; 1/2 TIME MINIMUM PREFERRED. M.A. PREPARED DEVELOPMENT ASSISTANT.	PART-TIME CLASSROOM OR SIMILAR MEETING SPACE.	NONE REQUIRED.
BASIC	ASSISTANT DIRECTOR FOR FACULTY DEVELOPMENT; PREPARATION IN STATISTICAL ANALYSIS, TESTING, AND SIMILAR AREAS. CLERICAL ASSISTANT.	PRIVATE OFFICE WITH ADJOINING CONFERENCE AND WORKSPACE.	COMPUTER TERMINAL ACCESS.
ADVANCED	1 ADDITIONAL DEVELOPER PER 100 FACULTY OR PORTION THEREOF. 1 CLERICAL ASSISTANT PER 3 DEVELOPERS. 1 GRADUATE ASSISTANT PER DEVELOPER.	1 OFFICE SPACE PER INDIVIDUAL; PLUS 1 OFFICE PER 50 FACULTY MEMBERS.	ADDITIONAL COMPUTER ACCESS FACILITIES.

CHART 3 STANDARD 6.2

Research and Evaluation Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	MAY BE ASSUMED BY DIR. OF LRC OR DESIGNEE.	NONE REQUIRED.	NONE REQUIRED.
BASIC	PART-TIME ASSISTANT WITH PREPARATION IN RESEARCH AND EVALUATION.	OFFICE SPACE.	ADDITIONAL OFFICE EQUIPMENT.
ADVANCED	ASSISTANT DIRECTOR FOR RESEARCH AND EVALUATION; M.A. PREPARATION WITH BACKGROUND IN COMPUTERS AND INFORMATION MANAGEMENT.	OFFICE SPACE.	COMPUTER TERMINAL AND PROGRAMMING FOR DATA COLLECTION AND ANALYSIS.

CHART 4 STANDARD 6.3.1

Creative-Production Function

Visualization

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME ASSISTANT, NOT LESS THAN 1/2 TIME FTE.	WORKROOM WITH TABLES.	DRY MOUNT PRESS, LIGHT TABLE, LAMINATOR, PAPER CUTTER, TRANSPARENCY MAKER.
BASIC	GRAPHIC ARTIST/PHOTOGRAPHER. DARKROOM ASSISTANT.	ART PRODUCTION STUDIO. DARKROOM AND FINISHING AREA.	DRAFTING TABLES, SYSTEM FOR LETTERING. COPY STAND AND CAMERAS. PHOTO PRINTING, FINISHING AND MOUNTING EQUIPMENT.
ADVANCED	GRAPHIC DESIGNER. PHOTOGRAPHER. CINEMATOGRAPHER. PRODUCTION, DARKROOM, AND FINISHING TECHNICIANS.	ART STUDIO. PHOTO STUDIO. CINEMA STUDIO.	8MM AND 16MM MOTION PHOTOGRAPHY, COLOR PROCESSING, AND ANIMATION EQUIPMENT.

CHART 5 STANDARD 6.3.2

Creative-Production Function

Audio

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME ASSISTANCE AS REQUIRED.	NONE REQUIRED.	AUDIO RECORDERS AND RELATED EQUIPMENT.
BASIC	PART-TIME ASSISTANTS, NOT LESS THAN 1/2 TIME FTE.	AUDIO STUDIO AND CONTROL ROOM.	TURNTABLES, TAPE DECKS, AUDIO MIXER, AND RELATED EQUIPMENT.
ADVANCED	FULL-TIME AUDIO PRODUCTION STAFF.	EXPANDED AUDIO STUDIO.	FILM SOUND EQUIPMENT. UPGRADED BROADCAST AUDIO SYSTEM.

CHART 6 STANDARD 6.3.3

Creative-Production Function
Slide-Tape

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	NONE REQUIRED.	NONE REQUIRED.	NONE REQUIRED.
BASIC	PART-TIME ASSISTANT.	WORK SPACE. ASSEMBLY/PRODUCTION ROOM.	2 SLIDE PROJECTORS, AUDIO TAPE RECORDER/ SYNCHRONIZER, DISSOLVE CONTROLLER.
ADVANCED	PRODUCER SHARED WITH SOUND MOTION PICTURE PRODUCTION.	VIEWING AREA.	ADDITIONAL PROJECTION, CONTROL, AND AUDIO EQUIPMENT.

CHART 7 STANDARD 6.3.3

Creative-Production Function
Sound Motion Picture

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	NONE REQUIRED.	NONE REQUIRED.	NONE REQUIRED.
BASIC	PART-TIME CINEMATOGRAPHER.	EDITING FACILITY.	8MM AND 16MM CAMERAS. EDITING EQUIPMENT.
ADVANCED	PRODUCER SHARED WITH SLIDE-TAPE SERVICES.	SHARED CINEMA STUDIO. SOUND EDITING AND STUDIO VIEWING AREA.	ANIMATION EQUIPMENT.

CHART 8 STANDARD 6.3.3

Creative-Production Function
Television

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	None required.	None Required.	Portable equipment available.
BASIC	Production assistant, full time.	Television studio-control room complex.	Studio equipment; 2 or more cameras, film chain, audio, and basic post-production editing. EFP/ENG minicam and recorder system.
ADVANCED	Assistant Director for Combined Creative Services. Additional production crew.	Color TV studio-control room complex. Remote production and transmission capability.	EFP/ENG 2 camera system. Sophisticated post-production capacity.

CHART 9 STANDARD 6.4.1

Distribution Function

Equipment

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	FULL-TIME DISTRIBUTION CLERK AND PART-TIME ASSISTANTS.	OFFICE, STORAGE, AND EQUIPMENT MARSHALLING AREAS.	APPROPRIATE AND ADEQUATE TO MEET 95% OF REQUESTS.
BASIC	FULL-TIME SCHEDULING ASSISTANT.	EXPANDED AREAS.	DELIVERY VEHICLES SUITED TO CAMPUS.
ADVANCED	ASSISTANT DIRECTOR FOR DISTRIBUTION SERVICES. ADDITIONAL ASSISTANTS.	EXPANDED AREAS FOR STAFF AND DELIVERY PERSONNEL.	RADIO-CONTROLLED DELIVERY VEHICLES.

CHART 10 STANDARD 6.4.4

Distribution Function
Electronic

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME ASSISTANTS FOR EQUIPMENT DELIVERY.	LOCAL OR CENTRAL (REMOTE) DISTRIBUTION AREA.	VTRs (AS NEEDED). MONITORS. HEAD-END EQUIPMENT.
BASIC	FULL-TIME ASSISTANT FOR FULL CLASS-TIME OPERATION.	CENTRAL ELECTRONIC DISTRIBUTION/RECEPTION FUNCTIONALLY LOCATED WITH TV PRODUCTION CONTROL.	MATV SYSTEM, CAMPUS-WIDE INTERCONNECTION.
ADVANCED	FULL-TIME TECHNICIAN.	EXPANDED AREAS.	COMPUTER INTERCONNECTS AND TERMINALS.

CHART 11 STANDARD 6.5

Distribution Function

Materials-Resources

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	FULL-TIME CLERK PER 35 HOURS, OR PART.	CENTRAL LIBRARY AREA.	STANDARD LIBRARY (PER ACRL STANDARDS).
BASIC	PROFESSIONAL LIBRARIAN.	SAME.	SAME.
ADVANCED	ADDITIONAL FULL-TIME CLERKS AND PROFESSIONAL STAFF AS APPROPRIATE.	SAME.	SAME.

CHART 12 STANDARD 6.6

Maintenance and Engineering Function

LEVEL	PERSONNEL	FACILITIES	EQUIPMENT
MINIMAL	PART-TIME TECHNICIAN.	SMALL REPAIR SHOP.	BASIC TOOLS AND TEST EQUIPMENT.
BASIC	FULL-TIME TECHNICIAN. FIELD ASSISTANTS FOR CLEANING AND INSPECTION.	EXPANDED SHOP.	SPECIALIZED TOOLS AND TEST EQUIPMENT.
ADVANCED	FULL-TIME ENGINEER AND STAFF.	EXPANDED SHOP, OFFICE, STORAGE, AND CONSTRUCTION AREAS.	SOPHISTICATED ELECTRONIC TEST EQUIPMENT. EQUIPMENT FOR DEVICE FABRICATION.